Designing and Managing a Community Garden

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Recap of the Last Webinar: Essentials for Starting a Community Garden

- Who’s in Charge of the Community Garden?
- What is the Community Garden’s Purpose?
- Is the Community Garden Organic?
- Finding the Right Site For Your Garden
- Water Availability
- What about Parking, Maintenance and Security?
- Tools/Machinery/Services
- Staffing the Community Garden
- Funding the Garden
Evaluating the site

- Sunlight
  - At least 6-8 hours, 8-10 is better

- Shade
  - Plant away from trees – plant trees away.

- Size of the garden/plots
  - Big enough to produce, small enough that it is not a chore

- Topography
  - What is the aspect?

- Visibility
  - How visible is it?
Evaluating the site

✓ Soil
  ▪ Textures – sand, silt and clay.
  ▪ Organic matter
  ▪ Depth of topsoil
  ▪ pH
  ▪ Soil test
  ▪ Pipes or lines

✓ Water
  ▪ Location
  ▪ Public Bathrooms?

✓ Electrical Power
  ▪ Helpful for construction
Increasing acidity

Neutral

Increasing alkalinity

Acidic Soils

Basic or “alkaline” soils

Soils

Most Montana soils

Soils

Battery Lemon
Acid Juice

Wine Normal
Distilled Water

Baking Soda

Soft Soap

Ammonia

Lye
pH affects nutrient availability
Evaluating the site

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Soil testing

• Use a tulip bulb planter

• Collect soil from upper 6 inches in about 10 locations

• Mix and send to lab

• See MT200705AG “Home Garden Soil Testing and Fertilizer Guidelines” for details and laboratory addresses

• www.msuextension.org
  – Publications/store
Evaluating the site

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✓ Water
  - Location
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✓ Electrical Power
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Evaluating the site

✓ Proximity to population
  ▪ Can Gardeners walk to site?
  ▪ Parking?

✓ Accessibility
  ▪ Handicapped accessible
  ▪ Parking
  ▪ Public Bathrooms

✓ Pre-existing assets
  ▪ Fences
  ▪ Sheds
  ▪ Soil
  ▪ Hardscapes
  ▪ Other materials
Evaluating the site

✓ Proximity to population
  ▪ Can Gardeners walk to site?
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✓ Accessibility
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  ▪ Other materials
Design Your Garden with the Community in Mind

- Use Planning committees
- Accessibility
- Pathways
- Irrigation
- Parking
- Tools
Gardening in Montana

- Short growing season
- Frost-Free Days
- Montana Climate

Summary

“If you garden in Montana, you are either brilliant or insane.”

http://gardenguide.montana.edu
Recommended Planting Dates — According to the Montana Climate Summary

- http://gardenguide.montana.edu/mtclimate.asp

- Average last killing frost in spring

- Average first killing frost in fall

- Average growing season is the # of days between the last and the first frost
Recommended Planting Dates –
A look at the MSU Campus

- Average last killing frost in spring for MSU
  May 24
- Average first killing frost in fall for MSU
  September 16
- Average growing season for Montana State University is 115 days,
- However, it is only an estimate as all days are not conducive to growing
- Seasoned gardeners in Bozeman will tell you that it is best to plant (frost intolerant plants) after June 1
Days to Maturity

• Length of time to harvest from the day that seeds or transplants are placed in the garden
• It is an average. Actual time will vary with growing conditions
• Recommend items that will grow in your growing season

• MontGuide: “Can I grow that Here? Vegetable Seed and Transplant Schedules for Garden or Container”
• MontGuide: “Planting a Successful Home Vegetable Garden”
• MSU Extension Publications http://www.msuextension.org/store/
Tilling the Soil

- Larger debris may need to be removed
- Rotary tilling works well
  - Soil should not be over-worked
  - Can cause a compaction layer
Should I Till in the Fall or Spring?

• Spring:
  – Better for sandy soils
  – Most soils need to be tilled in the spring anyway to smooth the soil for planting

• Fall:
  – Earlier spring planting
  – Pests and perennial weeds reduced
  – Freeze/thaw
  – Trapping snow
  – Incorporation of amendments
  – OM will decompose
## Soil Amendments

<table>
<thead>
<tr>
<th>Amendment</th>
<th>Purpose</th>
<th>Fact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coarse Sand</td>
<td>Improve aeration</td>
<td>Can cause concrete-like affect in soil with heavy clay</td>
</tr>
<tr>
<td>Peat Moss, Compost, Composted Manure</td>
<td>Increase water and nutrient-holding capacity</td>
<td>Great amendment, but watch for herbicide residual</td>
</tr>
<tr>
<td>Sulfur</td>
<td>Increase acidity</td>
<td>Will only change slightly</td>
</tr>
<tr>
<td>Limestone</td>
<td>Increase alkalinity</td>
<td>Will only change slightly</td>
</tr>
<tr>
<td>Gypsum</td>
<td>Decreases sodic conditions</td>
<td>Takes too long and are short lived, leaches iron</td>
</tr>
</tbody>
</table>
How about Manure?

Make sure that the manure is fully composted and contains no residual herbicides!
How about wood ash?

- Not recommended for gardens
  - Raises the pH
  - High in salts
  - No more than a 5-gallon bucket full per 1000 sq.ft.
- Watch the pH levels!
Crop Rotation

- Many disease organisms are soil born
- Curbs insect infestation
- Reduces depletion of soil nutrients
Season Extension

- Cold frames
- Hot beds
- Cloches
- Row covers
Row Covers

• Tunnels

• Floating row
  – Season extension
  – Earlier maturity
  – Insect and wind protection
  – Frost protection
Community Garden Maintenance

• Guidelines
• Timetables
• Checklists

• Tools available to do the work
• Refreshments

• Get member and community feedback
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