A Good Community Garden Site Includes

- Sun and Shade
- Proximity to Entrance and Water
- A Future
- Continuity
- Access

Design Considerations

- Garden Components
- Space
- Light
- Water
- Time
- Appearance
- Financial
- Houston Environment
- Other considerations—traffic, security, utilities

Garden Components

- Vegetable Garden
- Fruit Trees
- Herbs Gardens
- Wildscape or Habitat garden
  - Includes insectary, ponds and wetlands
- Heritage Gardens
- Urban Forests
- Compost
- People care (rest area, toilet)

Fruit, Vegetable & Herb Gardens

- Hands-on Education
- Year-Round food production and learning

Vegetable garden and/or fruit trees

Vegetable and Herb Requirements

- Need 6–8 hours of sun
- Best to have winter protection from north winds
- Best to orientate the beds in a north-south direction
- Aisles minimum 3 ft; unless wheel chairs will be in the garden then 4-5 ft—corners may be wider
- How many beds and how large do you want the beds?
- Raised beds or country rows?
Fruit Tree Requirements
- Most fruits need full sun
- Citrus is an exception
- Adequate drainage is essential
- Fruit trees do best when they have minimal competition with other plants.
- Maintain 4 ft. diameter of mulch with a hard edge.
- Young trees need protection in high traffic areas.
- Special consideration for individual fruits.

Wildscape or Habitat Gardens
Opportunities to
- See nature up close
- Learn effective land care
- Learn how to provide habitat
- Insectary for pest control
- Can include ponds/wetlands

Habitat Garden

A Natural Pond with Wetlands

Wildscape and Habitat Requirements
Light:
- Wildscape: These are native plants and so you can have all types of light, variety is best: sun, shade, damp and dry. This gives a greater choice of plants
- Butterfly garden: Require full sun or 6 – 8 hours of sunlight
- Ponds: Best in full sun (6-8 hours) since more varieties of plants to consider for pond.
- Wetland areas: Can be partially shaded

Construction:
- Best in raised beds
- 3-4 inches organic matter or soil
- Another 3 inches of mulch on top

Heritage Gardens
- Centered around a particular culture
- Cultivates cultural traditions
  - Food
  - Arts/Crafts
  - Oral histories
Urban Forest

Compost

Brown + Green + Water + Air

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Compost

People Care

- Rest Area with Shade
- Toilet

Choosing Components

Pros and Cons
- Examples:
  - Habitat beds and Fruit trees are easiest to maintain but no immediate reward (food)
  - Ponds are most expensive to build may solve drainage issues
  - Vegetables are exciting but most time intensive
- What do you want?

Space

- Choose the best site for your components.
- Garden components and requirements
- Site access

Site Access

Can this truck . . .

. . . get through here?
Light

- Where is the sun?
  - Observe many times
  - Consider surrounding trees and buildings
  - 6-8 hours of sunlight minimum year round

Seasonal Light Changes

How does the earth’s rotation affect seasons of the year?
- What is happening?
- How does this affect your design?

Diagram of the Earth's seasons as seen from the north. Far right: December solstice or Winter solstice

Trees and Buildings

- Existing Trees
  - Evergreen or Deciduous
  - Current and expected size
- Buildings
  - Shadows through the seasons

Water

- Bringing water in
  - New line or existing line
  - Rainwater harvesting
    - Rain barrel
    - Cistern
  - Considerations
    - Faucet locations
    - Planning for garden
    - Keyed faucets only
- Moving water away - drainage

Drainage

- Observation
  - How does water flow across the site?
    - Where is the water coming from?
    - Where is the water going?
  - Where does water collect?
    - Possible solutions
      - Keep water on site
      - Drain water off

Time

- How long can you use the property/campus. What are the plans for it’s future?
- Start Small
- Consider components
  - Fruit trees least time intensive
  - Vegetables and water features most time intensive
- Biodiversity
  - Bring in beneficial insects and pollinators
  - Gardens do best with daily attention
    - Less attention results in time consuming issues
Appearance

- Is it beautiful?
- Is it inviting?
- Does it fit?

Financial

- Start small
- Plan for growth and sustainability
- Materials
- Maintenance and Water
- Insurance

Houston Environment

- Temperature extremes
- Water events & drought
- Strong Winds
- Humidity

Other considerations

- Traffic
- Security
- Utilities
- Materials

Security

- Vandalism
  - People
    - Garden placement
    - Component placement
  - Animals
    - Fencing
    - Bait plants/crops

Utilities

- Where are your utilities?
- Contact Lone Star Notification Center: they will contact all of the utilities and within 48 business hours they will mark the area:
- Give the following information
  - Key map coordinates page and letter
  - Major cross streets
  - Actual address
  - Part of property and nature of activity
- Lone Star Notification # at 713-223-4567
- They are marking major lines only!
Your Design

• Create a site plan
  – Measure everything
    • Measuring: Keep the tape straight, check angles (don’t assume right angles)
    • Include all existing objects (trees, buildings, fences, water etc) include overhangs and tree canopies
    • Determine N, S, E, & W and mark on site plan
  – Include all existing objects (trees, buildings, fences, water etc) include overhangs and tree canopies.

• Start your design
  – Decide on scale (generally ¼ inch = 1 foot); record on drawing
  – Use pencil
  – Include cardinal directions (N, S, E & W)
  – Remember to including existing features (trees, buildings etc) that will be part of the garden.
  – Always include every measurement

Recommendations for Designing a Garden

Design Exercise

1. Measure existing components you are keeping
2. Record your measurements on graph paper using ¼ inch = 1 foot scale
3. Choose components for your garden and the place them in your design.
   REMEMBER to include the actual size of your edging materials in your drawing.

Recommended Dimensions

• Vegetable Beds-interior dimensions (length is variable)
  – 10ft x 3ft for 5 & under
  – 10ft x 4ft for 5 to adult
  – 10ft x 5ft for adults

• Bed height
  – Age 5 and younger 18-20 inches
  – Everyone else 8 inches unless adaptation needed for physical limitations.

• Habitat/Wildscape: Sm 15ft x 4ft; Lg 30ft x 10ft

• Scent garden: 15ft x 4ft

• Pond: minimum 20ft x 10ft but larger is better, plan for 4-ft of planting around 60% of edge. Include a deck of 12ft x 8ft (min) for safe student access to pond

• Fruit trees (mature sizes diameters):
  – Citrus, feijoa, figs, & loquat: 12 ft
  – Limequats & kumquats: 7ft
  – Persimmons & pears: 10ft
  – Pomegranates & apples: 8ft
  – Blackberries 10ft x 4ft bed (min)

Edging Materials

• 8x8x8 concrete blocks (hollow 1.28/blk or solid 2.80/blk) available from Camp Logan or Home Depot
• 16x8x4 concrete block (solid) available from Home Depot or Lowes
• Windsor Retainer 12Lx10Wx4H; 1.82/blk available from Home Depot or Lowes
• Urban Harvest block 10x5x5; $.50/blk available from Cresco 866-491-6819
• Cedar
  – Fence slats 8ft x 5 ¼ in W x ½ in thick $2.99/board
  – 8ft x 8in W x 2 in thick; 19.95/board
• Logs for habitat/wildscape beds: free but require collection

When To Plan And Build The Garden/Outdoor Classroom

• Planning – anytime but TAKE YOUR TIME
• Building

Community Gardens

Gardens don’t grow unless they are planted in the right place by people who know how to garden.
Similarly, community gardens don’t grow unless they are put in the right place by people who know how to make them thrive.
Homework Assignment

1. What are components of your garden? Decide on the your priorities and for school what are your curriculum objectives?
2. Continue locating funds for your project and/or writing grants.
3. Continue identifying the assets in your community.
4. Visit several community gardens. Look at their designs. Why have they done things the way they have? Find out what has and hasn’t worked and why.
5. Design your community garden. This is your master plan and can be implemented in pieces over time.

What You Can Grow

- Most vegetables
- Most fruits
  - The exceptions are true tropical fruits & arctic fruits like cranberries & gooseberries.
- Most types of edible herbs also grow here and many types of grains.
- Native and well-adapted plants

If you interested, there is a slide presentation on fruits and vegetables for this area.

Recommended Classes

- Starting a Community Garden 2: Implement and Grow
- Hands On: Constructing the Home Fruit and Vegetable Garden
- Growing Organic Vegetables
  - Series of 10 classes starts Jan
- Fruit Tree Care
- Growing Great Tomatoes
- Introduction to Permaculture
- Seed Selection and Ordering
- Seed Saving
- Hands On: Backyard Composting and Maintaining Healthy soil
- More classes can be found at www.urbanharvest.org

Create a bio-diverse multi-habitat landscape

And establish sustainable environments that grow richer over time