



Gardening for Beginners

2 - How Does Your Garden Grow?

UCCE Master Gardener Program
Santa Clara County, CA



Review and questions from last week's class

Review students' garden sketches.

This class covers plant types, researching plants.

Learning what questions to ask about plants helps the gardener decide whether a plant is a good choice and where the right place is to plant it.

Plant parts

Leaves: Photosynthesis, converts sunlight to energy for the plant

Roots: Gather water and nutrients from soil. Often much wider than the visible part of the plants.

Tree roots can extend over three times the width of the canopy.

Stem: Moves energy from leaves to roots, and moves water and nutrients from roots to leaves.

Growing tip: Where new growth happens. Some plants only have one main growing tip, others naturally branch out. Pruning (cutting off parts of the plant) can affect plant growth.

Branches: Get larger, but don't get higher.

Flowers: Ornamental, but also how the fruit and seeds will be produced. Note: in botany, many vegetables are the 'fruit' of the plant, e.g. tomatoes, eggplant, peas, cucumbers.

Buds: Leaves or flowers that haven't opened up yet or growing point for branches.

Pollination: The transfer of pollen from an anther of a plant to the stigma of a plant, enabling fertilization and the production of seeds

Types of plants

Annual

- Only live one year or one season
- Examples: Most vegetables, many garden flowers, some herbs (e.g., basil, cilantro).
- Some plants come back year after year because they reseed themselves (California poppies, calendula, arugula), but they are still annuals.

Perennial

- Can live for many years in the right climate ("Hardy to zone N")
- Trees, shrubs, and most landscaping plants are perennial
- Sometimes the aboveground part dies, but the plant regrows from the roots every year
- Examples: Most fruits, some flowers, bulbs like daffodils, most grasses, many herbs (e.g, rosemary, sage, chives)

Deciduous

- Perennials that drop their leaves annually, usually in the fall/winter
- Examples: Maples, figs, roses

Evergreen

- Perennials that stay green year-round, dropping old leaves occasionally
- Examples: Pine trees, junipers, magnolias (some), palms, citrus, star jasmine

How do you know what type of plant it is?

Can't usually tell just by looking. Read plant tags, look in reference books, look up on the web

Why is the plant type important?

Affects decisions on where to plant it, how to care for it, or whether to buy it at all.

Researching plants

High quality sources

- Web sites from colleges and universities, with .edu extension
- Plant-oriented nonprofits, with .org extension, i.e. Calscape.org
- Commercial and mail-order nurseries may or may not provide complete information

Planting diagrams

Spacing questions to ask:

- How tall will the plant get?
- How wide will it get?
- How much room is needed between plants or between the plant and structures?
- Does it need support, and if so, what kind?

How do you know? Can't usually tell just by looking. Read plant tags, look in reference books, look up on the web

Remember: Putting the right plant in the right place will make both the plant and you happy.

For next week

Make a plant list of 4 to 5 plants you would like to grow. Include sun, soil, water, and space requirements

Scavenger hunt!

- Using some of the resources listed below, find the following:
 1. Your USDA climate zone
 2. Bird attracted to Pineapple Guava
 3. An interesting garden design (or planting plan)
 4. Scientific name of Seaside Daisy
 5. A small deciduous tree native to California
 6. A vegetable to grow in the fall, winter, or spring (not summer)

Resources

Some suggested resources for researching and learning more about plants

USDA Plant Zone Hardiness Map

<https://www.plantmaps.com/interactive-california-2012-usda-plant-zone-hardiness-map>.

UC Master Gardeners Santa Clara County

<http://mgsantaclara.ucanr.edu/garden-help/vegetables/>

University of California Botanical Garden at Berkeley

<https://botanicalgarden.berkeley.edu/>

Santa Clara County Water District, watershed approach guide

https://www.valleywater.org/sites/default/files/Watershed%20Approach%20to%20Landscape%20Design_G3-APLD-Book_v8NoBleed_2018.pdf

South Bay Green Gardens (Scroll down for links to various garden plans.)

<https://www.southbaygreengardens.org/landscape-designs>

East Bay M.U.D. Plants

<https://www.ebmud.com/water/conservation-and-rebates/watersmart-gardener/plants-and-landscapes-summer-dry-climates/>

Western Hort

<https://www.westernhort.org/>

SelecTree: A Tree Selection Guide, Cal Poly

<https://selectree.calpoly.edu/>

California Native Plant Society plant database

<https://calscape.org/>

Going Native Garden Tour

<https://gngt.org/GNGT/HomeRO.php>

UC Davis Arboretum All-Stars

<https://arboretum.ucdavis.edu/arboretum-all-stars>

UC Davis Arboretum All-Stars Planting Plans

<https://arboretum.ucdavis.edu/tags/planting-plans>

Herb Society of America (example of a plant society page)

<https://www.herbsociety.org/hsa-learn/>

Monrovia Proven Winners

www.provenwinners.com/learn/right-plant-right-place

Books:

Golden Gate Gardening, 3rd Edition, by Pam Peirce (vegetables)

Wildly Successful Plants: Northern California, by Pam Peirce (2004)

The New Sunset Western Garden Book (all types of plants; 9th edition, 2012)

Plants and Landscapes for Summer Dry Climates, East Bay Municipal Utility District (2004)

Master Gardener Program

Master Gardener program volunteers are trained by the University of California Cooperative Extension. Our mission is to develop, adapt and extend research-based horticultural information and educational programs to the residents of Santa Clara County.

Master Gardener Events

Master Gardeners host and participate in a variety of activities, ranging from in-garden talks and demonstrations to multiple week courses. A full listing is available through our monthly “Tips & Events” email, and on our Website, <http://mgsantaclara.ucanr.edu/events-calendar/>

Master Gardener Help Desk

- E-mail questions using our website:
<http://mgsantaclara.ucanr.edu/contact-us/ask-a-gardening-question/>
- Call the Help Desk: 408-282-3105 (9:30 a.m. – 12:30 p.m. Monday through Friday)
- Bring specimens to the Help Desk office during hours above:
1553 Berger Drive, Building 1, 2nd Floor, San Jose, CA 954112

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