

Sustainable Gardening Methods

The Claremont Garden Club encourages gardens that use less water, less fertilizer and fewer pesticides, and which include a diversity of plants offering benefits such as wildlife habitat, home-grown food, and shade to offset heat effects on homes

and outdoor spaces. Sustainable practices include rain harvesting, mulching, composting, recycling and reusing materials. Non-sustainable practices include excessive water, pesticide, and fertilizer use, improper pruning, large cool-season lawns, synthetic turf, and inefficient irrigation.

Be Water-Wise (follow local ordinances) Lawns

- I. Reduce lawn overall to less than 20% of lot area
- 2. Let cool season grasses go dormant in summer
- 3. Irrigate lawn only when it begins to wilt. Avoid short, frequent, shallow applications
- 4. Water in the morning (conserves water, reduces potential disease problems)
- 5. Mow high to encourage deeper, drought- and pesttolerant root systems and shade out weeds. Cut less than a third of the grass blade each time
- 6. Eliminate lawn from front garden

Landscape plants

- Water the soil at the base of the plant. Wet leaves are prone to diseases. (However, occasional overhead watering in the morning during hot, dry weather can help to cool the plants and provide moisture for beneficial insects & spiders.)
- 2. Create some areas in the garden that, once established, will survive on natural rainfall
- 3. Group plants with similar water requirements (create 'hydrozones') and adjust watering accordingly

Irrigation systems

- Check the irrigation system regularly: replace broken sprinkler heads and make sure the hardscape, sidewalks and streets aren't being watered
- 2. Install a rain shut-off device on automatic systems
- 3. Install a state-of-the-art smart controller
- 4. Design or modify the irrigation system to water each hydrozone appropriately
- 5. Use a drip- or micro-irrigation system where possible
- 6. Hand-water plants when possible
- 7. Use soil moisture meter; water only when needed

Runoff

- I. Direct roof runoff into a rain barrel or planted areas
- 2. Use groundcovers to decrease erosion on thinly vegetated areas under trees or on slopes.
- 3. Use pavers set in sand, gravel, mulch or other porous surfaces for walkways, patios and driveways
- 4. Create low areas or terraces to catch runoff
- 5. Use mulched beds along the low edges of your property to catch runoff
- 6. Keep drains, waterways and drainage areas clear

Choose appropriate plants

- I. Use plants that are low-maintenance (need little or no pruning, fertilizing, pest control)
- Use at least 4 plants that are native to Claremont (see Native Plants for your Garden on the Sustainable Claremont website)
- 3. Choose plants native to other areas of California or the world but which are adapted to local conditions (but be sure they are not invasive species)
- 4. Organize plants according to maintenance needs
- 5. Choose drought-tolerant grass species such as turf-type tall fescue or zoysia for mown lawns
- 6. Replace lawn with native grasses or low water-use and low maintenance ground covers
- 7. Remove invasive exotic plants such as Tree of Heaven and fountain grass from your landscape

Use trees and tall shrubs to reduce energy use:

- 8. Shade the southern and western sides of your home and your air conditioner compressor
- 9. Plant deciduous trees on southern side to allow sun to heat your home in winter, shade in summer
- 10. Plant evergreen trees and shrubs on northwestern exposures to reduce wind

Support Wildlife (Check www.nwf.org for ideas)

- I. Use plants that provide cover, nesting areas or food sources for birds, butterflies and other wildlife.
- 2. Provide a water source (note: change birdbath water every other day; keep mosquito fish in ponds
- 3. Maintain wildlife shelters: bat house, birdhouse. dead tree or uncultivated patch for ground-nesting bees
- 4. Use plants both wildlife and people like: thyme, anise, basil, carrot, coriander, dill, fennel, mints, sage, etc

Food production

- I. Use pavers, bricks or wood chips between beds to prevent compacting soil where roots grow
- 2. Use fertilizers designed for vegetables or fruits and use only the amounts suggested (too much can kill plants and pollute runoff)
- 3. Add compost regularly to maintain beneficial soil microorganisms and worms, and soil structure

- 4. Water more frequently during early growth, after transplanting, and during fruit production
- 5. Grow food where plants get at least 6 hr sun / day
- 6. Make beds away from competing tree roots
- 7. Include food plants in regular garden beds
- 8. Mulch! Straw, grass clippings, newspaper, compost, leaves
- 9. Don't cultivate soil when wet-it destroys structure

Mulch

Mulching retains soil moisture, moderates soil temperature and helps prevent erosion and weeds. (Note: fresh organic material robs nitrogen from soil-age 6 months before using.)

- I. Mulch most open areas in landscape beds
- 2. Keep mulch under 4" deep unless drip irrigation is underneath it or water may not get through
- 3. Leave at least an inch between the base of a tree or shrub and the mulch or microorganisms which decompose the mulch may also harm the plants.
- 4. Let healthy leaves stay where they fall to provide a natural mulch (remove diseased ones)
- Use by-product mulches such as shredded hardwood, pine bark, or pine bark nuggets (Note: too much hardwood mulch can cause manganese toxicity in acidloving plants, like azaleas.)

Fertilize Wisely

Fertilizers can increase soil salinity, cause excess growth (creating more work), pollute groundwater and the ocean

- 1. Test your soil for nutrients and pH every 3 to 5 years
- 2. Use fertilizers designed for the general type of plants you want to feed (lawn, fruit trees, vegetables, flower beds, acid-loving plants, etc)
- Fertilize cool season grasses only in the fall Fertilize warm season grasses only in spring.
- 4. Keep fertilizer off hardscape
- 5. Use slow release, or natural, organic fertilizers
- 6. Compost garden waste and use it to feed your plants
- 7. Fertilize only as needed to maintain health; reduce or even eliminate use of fertilizers

Recycle

- 1. Leave grass clippings on the lawn to decompose
- 2. Use leaves, dried grass clippings and pine needles as mulch (pine needles are great for acid-loving plants)
- 3. Maintain a compost pile with collected clippings, leaves and vegetable scraps (no meat scraps)
- 4. Use prunings for stakes and trellises
- Use broken concrete, old bricks, rocks dug from beds, etc, for paths, as patio paving, as edging and for other appropriate projects

Use Integrated Pest Management (IPM)

Coexist with garden pests. Use herbicides and pesticides as little as possible to avoid creating resistant strains or harming desired organisms (including people!)

- 1. Choose pest- or disease-resistant varieties of plants
- 2. Walk around your yard at least every two weeks and look for signs of problems.
- 3. Pull out or hoe weeds down when they are young
- 4. Mulch beds to reduce weed growth
- 5. Remove diseased leaves from the ground, and diseased plants to prevent continuing infection
- Examine leaf undersides for egg masses and spider mites. Pick off pests and diseased leaves by hand if possible (do not compost diseased material)
- 7. Use traps, barriers, or other non-toxic methods
- 8. Attract beneficial insects to your garden by planting beds with members of the mint, aster, Queen Anne's lace and cabbage families
- 9. Never apply pesticides routinely without checking first that they are really needed
- If treatment is necessary, try environmentally friendly options first: horticultural oils and soaps, botanical insecticides like neem, Bacillus thuringiensis, (B.t.)
- 11. Only treat the actual plants that need it and not the whole area. Be sure garden services do this.

Prune trees and large shrubs properly

Excessive pruning of ornamental trees destroys their beauty and health. Mature trees do not need yearly pruning. Each species has a natural growth pattern which should be encouraged (note: fruit trees have special pruning needs) See www.treesaregood.com for more info.

- I. Do not top, hatrack, or bowl cut trees
- 2. Do not remove more than 25% at any time
- 3. Do not prune during nesting season
- 4. Follow arborist's guides (see our website for links)



More information can be found on our website: www.claremontgardenclub.org

To receive the monthly Garden Club newsletter, send a request to info@claremontgardenclub.org

(Adapted from the University of Maryland Bay-Wise Certification program)