

THE CURIOUS GARDENER

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A PEEK AT PERFECTION- VIEWING MATURE PLANTS



Sooner or later many of us will be involved in some kind of landscaping effort. It may be adding to or refurbishing an existing garden or starting with a clean slate and creating something completely new.

A logical place to start is to develop a plot plan and then begin the process of selecting appropriate trees and plants. The *Western Nevada County Gardening Guide*, published by Nevada County Master Gardeners, is an excellent publication to assist in this process and addresses such potential problems as water requirements, fire safety and deer resistance. *Sunset Western Garden Book* is also a good reference.

Once we develop a preliminary plant list, the next step may be to look at pictures in catalogs or horticultural reference books. At this stage, it is well to remember that pictures are most often of mature plants and the reality is that plants come to us bare root or as woe-fully little plants in small pots. A visit to a local nursery is useful but incomplete, since many of their

plants are immature. It can be most helpful and certainly interesting to see the trees or plants we are considering at their mature stage in a well-developed environment.

If our selection involves native trees, it is quite easy to observe mature specimens in the many natural areas that exist in the foothills. Remember that the little Ponderosa pine, Incense cedar, Douglas fir, or Black oak seedling is going to be a BIG tree.

Take the opportunity to look at plants that have matured over the years in various public areas. Just driving or walking the streets and parks of Roseville, Auburn, Grass Valley, or Nevada City is a worthwhile horticultural event. Ever since the mid 1800's, immigrants have brought with them the trees and plants they knew in their previous homes. The magnificent maples, hawthorns, and fruit trees that help make this such a wonder-



ful place to live have intermixed with the native trees and plants to provide the variety that we observe today.

Ben Braly and JoAnn Moore
Nevada County Master Gardeners

Many Master Gardeners, through their interest in history and from taking local courses in plant identification, have had the opportunity to visit some special places in the area which provide an opportunity to "see into the future" of plant development. Two such places are the Empire Mine State Historic Park in Grass Valley and the Arboretum at U. C. Davis.

The **Empire Mine State Historic Park** includes 13 acres of landscaped estate grounds that surround the Empire Cottage built by William Bourn, Jr. in 1897. The gardens and grounds at the Empire Mine have over 150 different trees and plants and an historic rose garden containing 60 varieties of roses that were available prior to 1929.



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While there are a few native trees and plants on the grounds, there are also plants from around the world. The *Deutzia scabra* is magnificent in the spring, as is a very old Chinese wisteria that climbs to the top of a pine tree. The unusual Snowdrop tree (*Helesia carolina*) and Japanese snowbell (*Styrax japonicus*) also grow there.

The rose garden, while not original, has climbers and large and small bush roses that were in existence prior to 1929. Anyone planning a rose garden, or simply wishing to buy a few specimen plants, can see not only the color and type of flower, but also the growth habit of the mature plant as well.

 Annuals were used in the original gardens but, with the constraints of a small maintenance staff, most of the flowerbeds now contain a variety of perennials. The perennial garden, adjacent to the historic greenhouse and north of the cottage, demonstrates the use of old variety plants, such as day-lilies, *Rudbeckia*, *Echinacea*, and *Crocsmia* in a modern garden. There are also large stands of classic iris ('Crimson King' and 'Cluny') as well as the lesser-known Gladwin and Winter iris. Large stands of *Lychnis coronaria* demonstrate an effective use of this plant.

Recent additions to the grounds at the Empire Mine State Historic Park will greatly assist visitors in gaining horticultural information. There are signs indicating the common and scientific names of 100 trees, and a self-guiding brochure, *A Walk through the Gardens* is available at the gift shop. Guided tours of the gardens and grounds are offered on Sunday afternoons

at 2:30, May 1 through Labor Day.

A trip to the **U.C. Davis Arboretum** is valuable to local gardeners in many ways. Native and exotic plants that we see only in small, one-gallon sizes at nurseries or in our landscapes are mature specimens at the Arboretum. Many plants will be new to the first time visitor. Plants are suitable for local growing conditions and are included in beautiful landscape designs.



Arranged in a series of gardens along a two-mile walkway that follows the banks of Putah Creek, the 100-acre Arboretum provides an array of mature plants representing different geographic areas, plant groups, horticultural themes, or historical periods. Signs provide the visitor with identification for individual plants.

The **Mary Wattis Brown Garden of California Native Plants** provides a rare and wonderful place to view mature native plants, shrubs, and trees. The garden includes drought-tolerant species suitable for landscape plantings. There are also some rare and endangered species included in the gardens.

A walk through this area provides a view of the extensive collection of *Ceanothus spp.* (California wild lilac), beautiful examples of bunch grasses, plantings of *Ribes spp.* (currant and gooseberry), eye-catching *Dendromecon harfordii* (California bush poppy), the beautiful *Carpenteria californica* (Bush anemone), the striking *Lupinus albifrons* (Silver bush lupine), and the majestic *Umbellularia californica* (California bay or California laurel), just to name a few. The list of available natives goes on and on, but it's best to see

this area for yourself. The garden is a great place to learn about native plants and how well they perform in local landscapes.

Flowering perennials and small shrubs well suited to central valley and foothill gardens are featured in the **Storer Garden**. Designed to demonstrate low water usage and minimal maintenance landscaping, this area includes a new addition of roses and companion plants. The collection encompasses species suitable for Xeriscape. You can see specimens of *Nepeta x faassenii* (catmint), a spreading ground cover; *Lobelia laxiflora* (Mexican lobelia), a striking perennial good in full sun or part shade that hummingbirds love; *Epilobium spp.* (California fuchsia), a very hardy plant that is good in mass plantings; *Leucophyllum frutescens* (Texas ranger), an interesting shrub for the lower elevations, and a host of other drought-tolerant plants suitable for our counties. Viewing the beauty of mature Xeriscape gardens is enlightening in itself.

Other areas include a theme garden based on medieval moon-viewing gardens of India and Japan, the **White Flower Garden, and the Mediterranean Section**, featuring plants native to the Mediterranean basin and generally suited to our climate. An **Early California Garden** represents the 1840 to 1860 era, when California was part of Mexico and rancho gardens included plants introduced from Europe, Asia, and Central America. The Oak Grove has more than 80 kinds of oaks, including oaks native to the western U.S. and many trees that are rare in cultivation. The **Weir Redwood Grove**



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VINE MEALYBUG ALERT

Cindy Fake

Horticulture & Small Farms Advisor
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There is a new pest threatening grapes in California and it may be invading Placer & Nevada counties. Vine mealybug (VMB) is new to California, but potentially extremely damaging to grape growers and our foothill wine industry. Unlike other mealybugs, vine mealybug infests all parts of the grapevine and can kill vines.

VMB first appeared in the Coachella Valley in the early 1990's, and has since spread to other California grape growing areas, probably via infested planting stock. To date, it has not been found in Placer or Nevada, but it is likely that it is here. If you have grapes, particularly vines planted between 1998 and 2002, you should be aware of the signs of vine mealybug presence and be on the lookout for it. In California, VMB has not been identified on any plant other than grape, so mealybugs on other plants are not of concern.

Vine mealybug overwinters on vine roots and in bark crevices and bud scales. As the weather warms and plants leaf out, the pests move up

to the leaves and canes, and eventually to grape clusters.

Vine mealybug females are small, less than 1/8 of an inch long, oval, and covered with a white, powdery wax. The female mealybug is unable to fly, so it must be carried to a new area by humans, equipment, or imported vines.

Vine mealybug sucks plant sap, causing vine weakening, and it may transmit leafroll viruses. Initial damage is minor, but increases as the population grows. VMB produces large amounts of honeydew, to the extent that it may look like melted wax on bunches. The honeydew is then colonized by black sooty mold, which coats leaves and bunches.

Eradication and control can be difficult, so early detection of infestations is essential. If you have grapevines, monitor them weekly during the growing season for signs of mealybug:

- **Ants** moving up and down the vine 
- **Honeydew** in large quantities – almost like dripped wax 

- **Sooty Mold** – black powdery film on honeydew
- Mealybugs on the backs of leaves

If you believe you have vine mealybug on your backyard grapes, please call the Master Gardener hotline (Nevada 530-273-0919, Placer 530-889-7388) and bring in a sample to be identified as soon as possible. Commercial growers should contact the Farm Advisor.



References

Vine Mealybug. 2003. UC Statewide IPM Project. <http://ipm.ucdavis.edu/PMG/r302301911.html>

Mealy Bugs in California Vineyards. 2002. UC ANR Publication 21612.

(Continued from page 2)

has one of the largest collections of *Sequoia sempervirens* (Pacific coast redwood). The **Desert Section** features cacti, succulents, fan palms, mesquites and other trees and shrubs.

The **Arboretum Terrace** reveals a beautiful home demonstration garden that uses plants and techniques suitable to local climate



conditions to exemplify how to reduce usage of water, chemical fertilizers, and pesticides. A refuge for birds and butterflies is part of the garden design.

A warning to avid gardeners: visiting the area once is much like trying to take one bite of your favorite food – one taste and sooner or

later you just have to go back for more.

References

A Walk Through the Gardens. 2003. Empire Mine Park Association.

University of California Arboretum Website. <http://arboretum.ucdavis.edu>

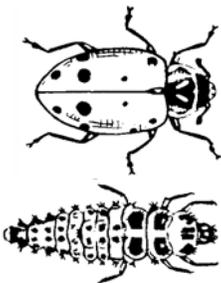
A LOOK AT TWO NATURAL ENEMIES

Peggy Tharp

Nevada Co. Master Gardener

If you were to describe a Coccinellid as an oval or round beetle, about ¼" long, that is one of the most familiar beneficial insects, you might have to give the common name, "ladybug", before there was a spark of recognition for this well known friend of gardeners.

The easily recognized adult Coccinellids are shiny, often brightly colored, with black, red, or orange markings. Before you decide that there's nothing new to learn about lady beetles, take a look at the larva. Would you recognize it as a good guy?



Lady Beetle

ACTUAL SIZE: 1/4 to 3/8"

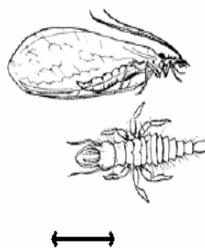
Feeds on aphids, mites, thrips, and mealy bugs.

chew and consume the entire prey. Adults can consume about 100 aphids a day. They also eat mealy bugs, mites, scales and whiteflies, with certain species specializing in each type of prey.

Most lady beetles overwinter as adults in protected spots on or near host plants. But adult convergent lady beetles, *Hippodamia convergens*, migrate to the mountains and form aggregations, where they are easily collected to sell for aphid control. Large numbers released in the field, though, are not very effective, because they tend to leave the release site.

Plants that attract lady beetles include buckwheat, coriander, dill, fennel, marigold, sunflower, tansy, yarrow, and calendula.

Chrysopa californica Coquillett, **California green lacewing**, is another beneficial that is easy to find. It has a beautiful slender, green body, lacy wings, and golden eyes.



Green Lacewing

ACTUAL SIZE: 1/2 to 3/4"

Feeds on insect eggs, mites, thrips, aphids, mealybugs, whiteflies, leafhoppers, and small caterpillars.

sometimes called aphid lions, gorge themselves on various small, soft-bodied insects such as aphids, scale crawlers, mealy bugs, whiteflies, leafhoppers, psyllids, small caterpillars, and insect eggs. All lacewing larvae are predaceous, but many adult green lacewing species feed only on honeydew, nectar, and pollen.

Females, who overwinter as adults on leaf litter, lay their white eggs on slender white stalks on the leaves or twigs in the vicinity of prey. Larvae emerge in 3 to 6 days. They are tapered at the tail and flattened with distinct legs and long mandibles for grasping prey. Larvae of some lacewing species have the curious habit of entangling carcasses of victims and other debris among their hooked body hairs, thus giving them a kind of camouflage.

Plants that attract lacewings include angelica, caraway, Coreopsis, cosmos, dill, fennel, Queen Anne's lace, sunflower, sweet alyssum and yarrow.

There are many lofty names that identify the tiny insects you commonly see in your yard. It's a good idea to get acquainted with some of these insects by sight, if not by name, because they can help control your garden pests.

References

Natural Enemies Handbook. 1998. Flint & Dreistadt. UC ANR Pub. 3386.

California Insects. 1979. J.Powell & C. Hogue. University of California Press.

The larvae are alligator-shaped, broad in the middle, tapering to the tail. They are usually black or gray with red, orange, yellow, or white spots. Many have spines or are covered with wax.

There are many kinds of lady beetles. Most of them are predaceous, both as adults and larvae. No plant-feeding Coccinellids are known pests in California.

The young larvae usually pierce and suck the contents of their victims. Older larvae and adults

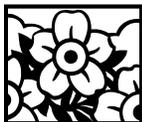
The adults, night flyers attracted to light, are often found around doorways. They are partial to nectar and pollen and also feed on aphid honeydew. The larvae,

MORE PERENNIALS

Judith Myrick

Placer County Master Gardener

Unlike annuals, which complete their life cycle in one growing season, perennials continue growing for several seasons. For the gardener, who does not want to replace plants very often, this is a good thing. A good thing gets even better when the perennials are drought-tolerant and low-maintenance.



Soil preparation is the most important step in establishing a perennial bed. Remove weeds and cultivate the ground to a depth of at least a foot. Some gardeners increase spacing between their plants to allow the roots of each plant more room to search for moisture. Amend heavy clay or sandy soil with compost to increase its air and water retention. Avoid additional fertilizer because it encourages lush growth that requires more water.

Drought tolerant plants should not be expected to do well under dry conditions right away. Plan to give them supplemental water for the first year until roots are established. Then water deeply and infrequently so that moisture reaches the root zone of the plants. Use mulch to preserve moisture and discourage weeds.

Drought tolerant perennials

Gaura (*Gaura lindheimeri*) is a long-lived perennial with a long bloom season. It grows 2½ to 4 feet tall with a similar spread. One-inch flowers grow closely set on tall spikes. A deep taproot makes Gaura very drought tolerant. It requires little attention. These plants look best in groups of 3 or more.

Blanket flower (*Gaillardia grandiflora*) produces bright daisy-like flowers all summer in mostly reds and yellows on a 2 to 3 foot tall plant. Divide plants every few years to keep them vigorous.

Russian sage (*Perovskia* 'Blue Spire') forms a woody-based clump with grayish stems and small gray-green leaves. In the fall, sprays of blue flowers appear on 3 to 4 foot tall stems. It tolerates drought and heat. Cut it back hard in early spring.

Red valerian, also called Jupiter's beard (*Centranthus ruber*), forms dense terminal clusters of red, pink or white flowers on 1 to 3 foot tall plants with gray-green foliage. It thrives on neglect and can be invasive, as it self sows.

Purple coneflower (*Echinacea purpurea*) grows 2 to 4 feet tall. Its deep pink flowers have drooping petals surrounding a raised cone. Birds love the dried seed heads. Coneflower grows in full sun, tolerates heat and drought, and does not need to be divided.



Yarrow (*Achillea* spp.) offers low maintenance, drought tolerance and long bloom. *A. filipendulina*, or fernleaf yarrow, has fernlike aromatic foliage. Flat-topped heads of tiny yellow flowers form on tall stems. Deadhead it to promote rebloom. This 3 to 4 foot tall plant spreads rapidly and needs division every few years. *A. millefolium*, common yarrow, is more commonly found in garden centers. It grows about 2 feet tall with white, pink or red flowers.

Torch lily or Red hot poker (*Kniphofia uvaria*) produces long slender, torch-like flower spikes 3 to 5 feet tall. The lowest flowers on the spike are pale yellow while the upper flowers are red. Narrow evergreen leaves form 2 to 4 foot clumps. It needs excellent drainage. Do not disturb established plants. Crowns can be removed from the edges of clumps in the fall.

English lavender (*Lavandula angustifolia*) forms a rounded 2 to 3 foot tall shrub with small fragrant gray-green leaves and 1 to 4 inch flower spikes in white, pink, purple, blue, or lavender. Shear plants every few years to encourage new growth. This plant becomes woody with too much water. Prune out dead wood.

Violet sage (*Salvia x superba*) grows 1½ to 3 feet tall with a similar spread. Violet blue flowers form on narrow spikes which should be sheared back to promote rebloom. Leaves are aromatic. Plants seldom need division.

While you are waiting for your perennials to establish themselves, consider using annuals to fill in the gaps in your garden bed. Annuals provide a temporary display of color and textural interest. By the time your perennials need more space, the annuals will be at the end of their life cycle and can be removed to the compost pile.



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Sunset Western Garden Book. UC Forest Products Lab. Fire-Safe Demonstration Garden Plant List.

Rodale's Illustrated Encyclopedia of Perennials. 1999. Phillips & Burrell. Rodale Press.

VEGETABLE SAVVY

About now, you should be approaching your vegetable garden with a healthy appetite. Juicy tomatoes and crispy lettuce for your healthy salad. Bell peppers

and squash for a quick stir-fry. Last, but not least, corn on the cob or as my grandmother would say, “roasting ears”. But, what if your garden is less than perfect? Are

there tomatoes cut off at the ground, wilted pepper plants, or stunted corn with poorly filled ears? Below are some answers to help reduce vegetable problems.

Vegetable	Problem	Probable Cause	Comments
	Tiny white, winged insects on underside of leaves	White flies	Use yellow sticky traps. Avoid pesticides, encourage natural enemies.
	Trails or tunnels in leaves	Leafminers	Not a significant cause of damage, tolerate.
	Blossoms fall off	Night temperatures too low (<55°F)	Don't plant too early.
	Leaves yellowish, slightly curved	Aphids - only a problem if honeydew or sooty mold become excessive.	Spray off with the hose. On more persistent infestations, use insecticidal soap.
	Plants stunted, leaves deformed	Aphids	Treat as for tomatoes
	Plants grow slowly. Blossoms fall, buds or fruit turn yellow.	Climate too cool or wrong variety for your area.	Plant in warmer weather. Plant recommended varieties.
	Bitter taste	High temperatures	Grow in cool months or in partial shade
	Young plants cut off at ground	Cutworms	Use cutworm collars.
	Plants begin to grow tall (bolt)	Prolonged hot weather causes plant send up flower stalks to form seed.	Romaine types are more tolerant of hot weather.
	Torn leaves	Birds	Tolerate or use shiny tape or movable object to deter.
	Incomplete kernel development	Poor pollination caused by not planting enough. Inadequate watering or hot weather, high winds.	Plant in blocks, use varieties suitable for your area. Maintain soil moisture 2-3 weeks before harvest.
	Ears only partially filled	Earwigs. Earwigs feed on silks and prevent pollination	Use traps: rolled newspaper or tuna fish cans, destroy trapped earwigs daily.
	Plants falling over	Excess nitrogen	Check fertilizer
	Worms eating kernels, tassels	Corn earworm	Apply drops of oil to silk inside tip of ear.

Table adapted from *Pests of the Garden and Small Farm*

The table includes a few of the vegetable challenges you might find. Start with healthy plants that are disease resistant and appropriate for your area. Stressed plants are more susceptible to disease and insects. Watch your

garden to catch problems early. Look at solutions that are less toxic to you and your environment. Try natural enemies, traps, insecticidal soap, and tolerance first. Call the Master Garden Office for advice. You'll be eating fresh, vine ripe

vegetables in no time.

References

California Master Gardener Handbook. 2002. UC ANR Publication 3382.



SUDDEN OAK DEATH UPDATE



Doug McCreary
Program Manager, UC Integrated Hardwood Range Management Program

Sudden Oak Death, or SOD, is a new type of mortality in oaks that was first observed killing tanoak trees by a UC Cooperative Extension Farm Advisor in Mill Valley, in 1995. Because affected trees often changed rapidly from a healthy looking green color to brown as leaves dried up and died, the name *Sudden Oak Death* or SOD was used to describe it.

In the late 1990's, Sudden Oak Death began to kill true oaks including coast live oak and California black oak. Because these species often occur at the wildland-urban fringe and are highly valued for their appearance and the distinctive character they lend to the landscape, mortality in these species greatly heightened the level of public concern, and stories about the threat of SOD were reported widely in the mass media.

In July 2000, University of California Plant Pathologists determined that a new and previously unnamed species of *Phytophthora* was the primary agent responsible for Sudden Oak Death. It was subsequently discovered that this new disease organism, now officially named *Phytophthora ramorum*, was also infecting and damaging rhododendrons in Germany and the Netherlands. While we don't know for sure, it is likely that this disease is a relatively new introduction to California.

Initially only reported in one California county, by September 2002, SOD had been confirmed in

12 counties, ranging from Monterey in the south to Humboldt in the north. It has also been found in the very southern part of Oregon. Accompanying this geographical spread has been a great increase in the number of confirmed hosts -- plants which may harbor the disease organism, but not necessarily be killed by it. It has now been isolated from 16 different California plant species including widely distributed plants such as manzanita, toyon, madrone, big leaf maple, and buckeye. Recently, Douglas fir and coast redwood were added to the list. So far, Sudden Oak Death has been restricted to the coastal regions of California, though there is concern it could spread eastward to the Sierra Nevada Mountains. There is also concern that it could spread to the eastern United States and infect the commercially important northern red oak.

In August 2000, the California Oak Mortality Task Force (COMTF) was established to coordinate a comprehensive and unified program of research, management, monitoring, education, and public policy aimed at reducing the impacts of elevated levels of oak mortality. The Task Force is working with University of California researchers to try to figure out where SOD occurs, how the pathogen is spread, and how it can be contained. It is also working with educators to make sure that the latest scientific information on management strategies to limit the spread of

SOD is disseminated to appropriate clientele.

We do not yet know how many oaks will be killed by SOD, so it is hard to predict how severe the consequences will be. We do know, however, that anything that kills large numbers of trees will increase wildfire risk and increase the chances of trees falling on people or property in urban areas. There is also great concern about the consequences of widespread mortality on wildlife since so many species depend on oaks for food and shelter. Needless to say, understanding and solving this problem is very high on the University of California's agenda.

More information about Sudden Oak Death can be found on the COMTF web site:
<http://www.suddenoakdeath.org>

Concerned about the health of your oaks? Don't assume SOD is the problem. First, evaluate the environment around your oaks. Root damage from digging or compaction, inappropriate summer irrigation, and lawns in proximity to oaks are far more likely to be the cause of ailing oaks. For more information, request publication 31-146, Landscaping under Native Oaks.



REUSE WHAT GROWS IN OUR YARDS

Jackie Kneeland & Sue Borden

Nevada County Master Gardeners & Composters

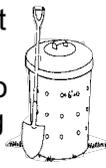
Recycling yard waste is a simple, sensible way to improve soil quality and reduce waste going to landfills. Our plants depend on the soil, much as a child depends on us, for a steady supply of food. A good soil can satisfy most of the garden's need for nourishment. And the best way to sustain soil quality is to improve its structure so it can store moisture and nutrients.

Compost is primarily a soil conditioner rather than a fertilizer. It improves soil structure and helps retain nutrients and make them available to plants. Nutrients can become chemically bound in the soil and not be available to roots. Compost helps keep those nutrients available to plants.

To provide a steady supply of compost we each need a composting style that works for us. In previous issues we have discussed building compost piles and using worm bins. There are other methods that may not require as much space or labor. In this article we discuss 5 easy ways to compost.

Open-air composting works successfully without big piles or containers. Small piles of yard waste decompose slowly wherever they are.  Make piles in a garden corner or near recently pruned shrubs. It's only when finished compost is desired in a short period of time that pile size, moisture, and aeration are important. Small piles shouldn't contain food scraps because they cannot be buried deep enough to conceal them from animals. Some people throw alfalfa

pellets or aged manure (from herbivores) on small piles to supply the nitrogen that fruit and vegetable scraps provide in standard composting methods.

Closed-air composting is a method for people who want to compost in a small area. Put yard waste and kitchen scraps in a solid plastic container with a tight-fitting lid and an open bottom. Try to find plastic that contains a photo inhibitor so it will last longer in the sun. The closed-air method can also be used by tightly covering a pile of waste with black plastic or by just throwing scraps into a plastic bag. The closed-air system is more likely to cause odor problems than other methods, but the waste will decompose. 

Soil incorporation includes 3 simple ways to compost underground with minimal effort and maintenance. Before trying these methods, check with your county environmental health department on required setbacks from wells and watercourses.

Posthole composting entails digging a hole with a shovel or posthole digger, adding kitchen scraps, and covering them with at least 8" of soil. Holes can be made around the drip line of a tree or in the garden between plants. The postholes also hold moisture that leaches a weak compost tea into the soil.

A *meandering trench* through the landscape is another composting method. First, dig a short, one-foot ditch. Chop yard trimmings

and food scraps and mix them into the soil in the bottom 4 inches of the trench. Then resume digging the trench until the materials are covered and a new trench is formed. 

The *pit and trench* method maintains a three-season rotation of soil incorporation. In the first season, the garden includes a trench to fill with food scraps, a row for growing crops and a third row to use as a path. In the next season, use the fertile soil in the former compost trench to grow crops, use the former crop row as a path, and loosen the former path to use as a new trench. After three years the cycle starts over again.

Just mulching with yard waste can reduce about 20% of the solid waste in the landfill. By grinding garden waste, leaves, and small branches into pieces and using them on top of the soil around our plants we conserve water, suppress weeds, and protect roots from extreme soil temperatures. Avoid material that re-sprouts, such as willow, alder, and Bermuda grass.

So, let's reuse our yard waste! Save transportation costs to the landfills. Give landfills a longer useful life. Reduce potential pollution. And, best of all, gain a free source of soil amendments!

References

Master Composter Training Manual. 2002. UCCE Placer Nevada.

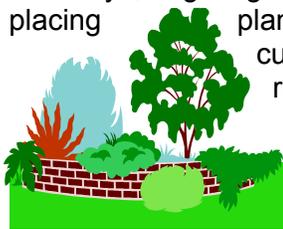
Recycling Tips for Gardeners. Master Gardener Program, Marin County.

XERISCAPE – STILL NOT CONVINCED?

JoAnn Moore
Nevada County Master Gardener

Do you think xeriscape means a dry, uninteresting landscape? Hopefully you read the article about this landscaping technique in the spring 2003 *Curious Gardener*. If you missed the article (available at <http://ceplacervc.ucdavis.edu/newsletterfiles/newsletter45.htm>) or have questions, read on.

Xeriscape employs several design techniques to fulfill its promise of water-wise, resource-efficient, and eye-appealing landscapes. Adding water features, patios, and walkways, irrigating efficiently, placing



plants with like cultural requirements together, using plants with higher water requirements in an effective but limited manner, limiting turf grass areas, and using mulches are all part of xeriscape.

Here are the answers to some common misconceptions and questions about xeriscape.

I have an established landscape that I enjoy. Can I still use xeriscape principles?

Yes. You can make sure that your irrigation system is operating correctly, that leaks are promptly repaired, and that the amount of water delivered during irrigation is consistent with seasonal needs. The use of proper pruning and mowing techniques, coupled with applications of mulch to help conserve soil moisture, are all xeriscape techniques.

I have heard that only certain plants can be used in xeriscape and that I shouldn't plant azaleas. Is this true?

No! Any plant can work in this type of landscape as long as it is in the appropriate environment. Xeriscape principles and proper plant selection guidelines recommend that when selecting plants for your landscape you always consider the existing characteristics of the intended plant location. If you want to plant azaleas, for example, select a location that offers some shade; acidic soil that is moist, well drained, and rich in organic matter. Place together plants with similar water needs. Xeriscape designs include limited use of high water plants aggregated in focal areas of the landscape.

I want to use native plants in my landscape. How do they work with xeriscape?

Native plants that grow in your area are generally good choices in a xeriscape design because they are acclimated to the environment. Native plants that need little summer water, once established, are good selections for the outer areas of the landscape.



As mentioned in the answer above, consider the cultural characteristics of each plant before selecting a planting location. Many native plants, for example, require good drainage and won't thrive in heavy clay soils.

I like the idea of using mulch in

my planting beds because of its many benefits. What kinds of mulches are available?

First, consider composting your yard waste. Composting provides a good source of mulch and reduces landfill levels. Nurseries and landscape material suppliers sell mulch in bags or bulk. Many local programs, such as fire safety and air quality control, have chipping programs. Although not as beneficial to the landscape as organic mulches, inorganics, such as stone, cloth, and plastic, are another option.



I want to set my automatic irrigation system timer. How do I know how often to water the lawn?

Lawns perform best when they receive regular (two to three times per week), deep watering. Generally, lawns can use 1 to 1 ½ inches of water a week in hot, dry weather and about ½ to ¾ inches in cooler months, if it hasn't rained. The irrigation system can be turned off during rainy seasons. Watering time is, of course, dependent on the amount of water your system delivers per hour. Irrigation suppliers, nurseries, and your local Cooperative Extension office have information on how to determine watering times for your irrigation system. Water your lawn as the soil begins to dry out, but before the grass wilts. Irrigate in the morning before 10:00 a.m.

Xeriscape principles also talk about regular maintenance,

(Continued on page 10)

(Continued from page 9)

which, for me, includes some mowing. How often should I mow my grass and how high should I set the blade?

When mowing your lawn, set the mower blade to cut to a height of 3 inches. If you mow lower, a shallow root system can develop because the grass blades are not large enough to provide necessary nutrients to the roots. Grass with a shallow root system is more susceptible to pests and drought. Remove about 1 inch of grass each time you mow. One inch of grass quickly decomposes and returns nutrients to the soil – so you don't have to collect the clippings. If you do not wish to leave the clippings or use a mulching mower, remember that grass clippings are an excellent source of "greens" for the compost pile.



I like the idea of saving water through creative landscaping; however, I live in a community with deed restrictions that specify how much grass and

what type of plants to use. What should I do?

You can use xeriscape principles in planning, designing and maintaining your landscape. However, local requirements may restrict your flexibility in selecting plants for an optimal design.

Principles, such as planning and maintaining an efficient irrigation system, become more important in your situation. You may consider working with your community to amend the existing requirements to allow for creativity, efficiency, and conservation of resources. The UC Cooperative Extension Master Gardeners can provide information and are available to speak to home owners groups about resource-efficient landscaping.

I'm looking forward to establishing my xeriscape so that I can eliminate yard work.

Xeriscapes require a lot less maintenance than traditional landscapes, but no landscape is maintenance free. By applying xeriscape principles, such as

putting the right plant in the right place and irrigating plants as needed, the landscape is no longer one giant entity in which every plant gets the same care. You add nutrients and water only when they're needed. You treat damage or disease only when and where required. In this way, you reduce the amount of money you spend on fertilizers, pesticides, fungicides, and irrigation. Regular maintenance, such as pruning, mowing, and checking the irrigation system, is important for the health of any landscape.

Want more information? Still have some questions? Contact your local U.C. Cooperative Extension office and ask to speak to a Master Gardener. We love to talk gardening.



References

California Master Gardener Handbook. 2002. UC ANR Publication 3382.U.C.

Xeriscape Principles. Southwest Florida Water Management District. www.swfmd.state.fl

<h2 style="text-align: center;">Production Information</h2> <p>The Curious Gardener is published quarterly by the University of California Cooperative Extension Master Gardeners of Placer and Nevada Counties.</p> <p style="text-align: center;">EDITORIAL BOARD</p> <table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><i>Nevada County Master Gardeners</i></p> <p>JoAnn Moore Robyn Buciak</p> </td> <td style="width: 50%; vertical-align: top;"> <p><i>Placer County Master Gardeners</i></p> <p>LouAnn Milward</p> </td> </tr> </table> <table style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;">  <hr/> <p>Cynthia E. Fake Horticulture and Small Farms Advisor</p> </td> <td style="width: 50%; text-align: center;">  <hr/> <p>Kevin Marini Program Representative</p> </td> </tr> </table>	<p><i>Nevada County Master Gardeners</i></p> <p>JoAnn Moore Robyn Buciak</p>	<p><i>Placer County Master Gardeners</i></p> <p>LouAnn Milward</p>	 <hr/> <p>Cynthia E. Fake Horticulture and Small Farms Advisor</p>	 <hr/> <p>Kevin Marini Program Representative</p>	<h2 style="text-align: center;">Subscribing</h2> <p>PLACER/NEVADA COUNTY RESIDENTS:</p> <p>Placer and Nevada County residents may receive The Curious Gardener by mail, free of charge. County residents are encouraged to subscribe by e-mail to save postage costs.</p> <p>OUT-OF-COUNTY RESIDENTS:</p> <p>Subscribe to this newsletter by paying \$6.00 per year (checks made payable to UC Regents) by mail, or free by e-mail by contacting the Cooperative Extension Office in Placer County:</p> <p>UCCE Placer County 11477 E Avenue, Auburn, CA 95603 (530) 889-7385 http://ceplacer@ucdavis.edu</p>
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SUMMER 2003 CALENDAR

Saturdays, Year Round, 8:00 a.m. – 12 Noon

Auburn Farmers' Market: Courthouse parking lot off Auburn-Folsom Road, Auburn

Saturdays, Year Round, 10:00 a.m. – 12 Noon

"Master Gardeners and Friends" Radio Talk Show, KNCO Radio, 830/AM, Grass Valley



JUNE

19 - 22 (Thursday - Sunday) - All Day

Placer County Fair

Demonstrations daily at Master Gardener booth

21 (Saturday) 9:00 a.m. - 1:00 p.m.

Composting 101

Auburn Senior Gardens, DeWitt Center, Auburn

Call to register (530) 889-7385

AUGUST

6-10 (Wednesday-Sunday) - All Day

Nevada County Fair

Demonstrations daily at Master Gardeners fair booth

16 (Saturday) 9:00 a.m. - 11:00 a.m.

Winter Vegetable Gardening Workshop

UCCE Nevada County Master Gardeners

Demo Garden, 1036 W. Main Street, Grass Valley

SEPTEMBER

13 (Saturday) 9:00 a.m.—11:00 a.m.

Tree Selection and Planting

UCCE Nevada County Master Gardeners

Demo Garden, 1036 W. Main Street, Grass Valley



CALENDAR DATES

If your non-profit Gardening Group has educational events for the public scheduled and wish to publicize the activity, please submit such information (*including day/date, time, location, fee if any, contact person and phone number, etc.*) to

The Curious Gardener.

Quarterly deadlines for inclusion:

March 1, June 1, September 1, and December 1.

WARNING ON THE USE OF CHEMICALS

Pesticides are poisonous. Always read and carefully follow all precautions and safety recommendations given on the container label. Store all chemicals in the original labeled containers in a locked cabinet or shed, away from food or feeds, and out of the reach of children, unauthorized persons, pets, and livestock.

Confine chemicals to the property being treated. Avoid drift onto neighboring properties, especially gardens containing fruits and/or vegetables ready to be picked.

Dispose of empty containers carefully. Follow label instructions for disposal. Never reuse containers. Make sure empty containers are not accessible to children or animals. Never dispose of containers where they may contaminate water supplies or natural waterways. Do not pour down sink or toilet. Consult your county agricultural commissioner for correct ways of disposing of excess pesticides. Never burn pesticide containers.

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