

# Green Notes

## GOT MULCH?

Anything used to cover the surface of the soil is called mulch. It may be inorganic, like rock or chipped rubber; it may be organic like straw, shredded leaves, chipped wood or bark. Mulch is often confused with compost, but while compost may be used as a mulch, its primary use is as a soil amendment. Larger sized materials used for mulch, however, generally should not be dug into the soil.

### Why mulch?

Much research has been done over the years to determine the effects of using different types of mulch. The following benefits of *organic* mulch have been repeatedly confirmed:

1. **Less water is lost from the soil.** With the surface covered, less evaporation happens, reducing your water need.
2. **Soil temperatures fluctuate less.** Soil stays cooler in summer and warmer in winter. This is a healthier environment for root growth and function, and fewer plants die from heat stress or frost. This is especially important for shallow-rooted plants.
3. **Weeds are reduced.** Excluding light reduces the number of weed seeds that sprout, and those that do are easier to remove.
4. **Water infiltration increases.** Covering the soil surface prevents the crusting that causes water to run off before infiltrating.
5. **Soil and plant health is improved.** Soil nutrient levels, structure, beneficial microbial activity, and other factors of soil health are all increased over time with the use of organic mulch.



2-3 " of bark keeps weeds and dust down

### Organic vs. Inorganic

Although inorganic mulch may have some of the same benefits as organic (reduced water loss and weeds), it does not add anything beneficial to the soil's health over time.

**ROCKS** are appropriate for specific landscape situations, such as dry river beds, sections for succulents and other rock garden plants, or gravel for paths that allow water to infiltrate. Rocks absorb and hold a great deal of heat, and care should be taken to locate only heat-tolerant plants in or adjacent to rocks.

**RUBBER** mulch application should be

# GREEN NOTES

2012

2

SUMMER/ FALL



Dry river beds work well bordered with natives like this *Mimulus aurantiacus*

reserved for under jungle gyms where its greatest feature, shock-absorbency, can be of use. It adds nothing beneficial to the soil, and may release toxic heavy metals into the soil or runoff water, especially if the source of the rubber is recycled truck tires.

## What's the best source?

THE NORTH COUNTY SANITARY LANDFILL contracts the recycling of all wood and greenwaste delivered to the site. A wide variety of high quality chipped and screened products is available for sale there at very reasonable prices. They are located at 17720 E. Harney Lane in Lodi, and are open the same hours as the dump: Monday - Friday, 7-4; Saturday, 8-4.

The best source is the one you can afford that also meets your needs. Several landscape supply businesses around the county have various sized products for sale by the cubic yard. Most deliver and waive the delivery fee for yardages over a certain minimum.

## What type and how deep?

Larger chunks stay put in windy areas and are perfect for large-scale landscapes and for under trees. The weight and size can cause them to roll off steep slopes, though. With large shrubs and trees, a 3 to 4-inch layer should last about 3 years before needing to be topped off. Be sure to keep the mulch about 3 inches from the base of the trunks to prevent rot.

The shredded "gorilla-hair" type product weaves together and holds best on slopes. Smaller bark nuggets or chipped wood works nicely in beds with smaller or delicate plants like annuals or tender perennials. A 2 to 3-inch layer will provide benefits without smothering plants. Be aware that it will break down and need to be replaced about every other year. In very windy sites, it may also be prone to blowing away.

**NEVER USE MULCH RIGHT NEXT TO THE STREET CURB.** This is a violation of the state's Water Efficient Landscape Ordinance: In heavy rains the mulch floats away, clogging storm drains and adding an excess of solid material if carried into the stormwater system.

**USE BLACK-DYED MULCH ONLY IN SHADE.** If used in sun, the mulch absorbs heat and actually *raises soil and surface temperatures* high enough to scorch plant leaves it contacts.

**MULCH LARGE LANDSCAPE POTS AND PLANTERS.** Though often overlooked, large landscape pots, like those used in commercial developments for small trees, shrubs, topiary, or seasonal color, benefit greatly from the addition of a 1 to 2-inch layer of organic mulch. Water use is significantly reduced by covering the pot soil. It also hides drip heads and reduces losses from the occasional "shooting" dripper.

## How much do I need?

There are on-line calculators that will tell you how many cubic yards you need depending on how deep you want the material. You can calculate it yourself easily if you know the area in sq. ft. :

**CUBIC YARDS =**

$$(\text{Area in sq. ft.}) \times (\text{\#in. deep}) \div 324$$

**Example:**  $(9' \times 25') \times (3'' \text{ deep}) \div 324$

$$225 \times 3 \div 324 = 2 \text{ cubic yards}$$





## SUSTAINABLE BY DESIGN: LANDSCAPE SEMINAR SERIES

A 3-part half-day seminar series  
**November 2, 9, and 16**  
8 am -12:30

### TOPICS:

#### SEMINAR ONE: DESIGN

- Sustainability principles, storm water management, state regulations, plant selection

#### SEMINAR TWO: CONSTRUCTION

- Site considerations including trees, irrigation, plan installation, landscape retrofits, materials inspection

#### SEMINAR THREE: MAINTENANCE

- Matching maintenance to design; near and long-term plans for the life of a landscape; tree plans

## GREEN NOTES

### WHO SHOULD ATTEND:

- Landscape architects, civil engineers, landscape designers
- Planning personnel involved in writing RFPs for landscape projects
- Landscape construction managers and site personnel
- Commercial and public landscape maintenance managers and site personnel

**Check online for  
registration:**

**Landscape Seminar  
Information**

**or call for mail-in form:**

**953-6109**

SUMMER/  
FALL

3

2012

## SAPSUCKER DAMAGE MIMICS BORERS

Many trees in the county have suffered serious damage from sapsucking woodpeckers this year. At first glance the holes may appear to be from wood-boring insects, but holes from the birds digging for sap will be in neat vertical or horizontal rows (depending on the species) rather than randomly scattered.

Sapsuckers prefer certain types of trees: birch, maple, pecan, pine, elm, and some oaks. They also pick certain trees within a stand to use for their feeding. Intensive drilling of a particular tree can block the vital flow of water and nutrients above the damage, and often the branches beyond the drill site begin to die within one or two years. Large portions of bark may die and peel off as well.

Preventing serious damage can be difficult unless the birds are spotted when they first appear in a favored tree stand. Hardware cloth or burlap may be wrapped around the initial drilling sites on the tree trunks, or sticky barrier may be used. Sapsuckers are attracted to trees with decay holes they can use for nesting, so remove these trees to discourage nesting if the birds begin to be a nuisance. If trees are damaged beyond recovery, be sure to replant with different species.



**Oak bark seriously  
damaged by  
sapsuckers**

## PLANT THIS

### *Bulbine frutescens* 'Hallmark'

Cape balsam, *Bulbine frutescens*, is an evergreen, succulent perennial which forms 1 ft. tall clumps. These clumps slowly spread to 3 ft. wide, and can be rejuvenated by breaking off the outer rooting stems and replanting them in the center during the early spring. 'Hallmark' blooms from early spring through fall, though it may slow down in the middle of the hottest months. The succulent leaves harbor overwintering lady bugs, which makes cape balsam a great companion for the front of rose shrubs.



These can be seen blooming in the demonstration gardens at the Robert J. Cabral Agricultural Center's Learning Landscape. (Address below.)

## CONTACT US:

Karrie Reid  
Environmental Horticulture Advisor  
UC Cooperative Extension  
San Joaquin County  
2101 E. Earhart Ave., Ste. 200  
Stockton, CA 95206-3949  
209-953-6109

[skreid@ucdavis.edu](mailto:skreid@ucdavis.edu)  
<http://ucanr.org/sites/sjcoeh/>

**To receive this newsletter via email, visit our website Newsletter tab and subscribe.**

The University of California prohibits discrimination against or harassment of any person employed by or seeking employment with the University on the basis of race, color, national origin, religion, sex, gender identity, pregnancy (which includes pregnancy, childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), genetic information (including family medical history), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services (as defined by the Uniformed Services Employment and Reemployment Rights Act of 1994: service in the uniformed services includes membership, application for membership, performance of service, application for service, or obligation for service in the uniformed services) or any person in any of its programs activities. University policy also prohibits retaliation against any employee or person seeking employment or any person participating in any of its programs or activities for bringing a complaint of discrimination or harassment pursuant to this policy. This policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's equal employment opportunity policies may be directed to Linda Marie Manton, Affirmative Action Contact, University of California, Davis, Agriculture and Natural Resources, One Shields Avenue, Davis, CA 95616, (530) 752-0495.

University of California  
Agriculture and Natural Resources

UCCE San Joaquin County  
2101 E. Earhart Ave, Ste. 200  
Stockton, CA 95206-3949