

Green Notes



Scalping exposes the soil to more sunlight, which in turn warms up the soil more quickly. This seems to be the primary factor in speeding up the return of color in the spring, besides genetically hardwired differences.

Clearly, these new cultivars show promise for turfgrass that doesn't require a large amount of winter wear. With water conservation becoming more of a management issue than ever before, these should be considered as viable alternatives to the more common cool-season turf types we have grown accustomed to seeing in parks, schools, and residential landscapes.

SPRING SCALPING SPEEDS SPRING GREENING OF BERMUDAGRASS CULTIVARS

Pressures to reduce water use have increased interest in the use of bermudagrass hybrids. Warm season-grasses like bermuda and buffalograss hybrids typically use 20% less summer water than their cool-season counterparts. Resistance to using them is due in part to their less-than-vibrant green dormant color, which can last as long as five months in the coolest areas.

New hybrids have a reduced dormant season, and now scientists in Italy, from a climate quite similar to ours, have shown that spring scalping can reduce the time to reach 80% green cover by an average of 11 days.

In both years of the experiment, the scalping was done on March 13 on eight well-established seeded varieties with rotary mower blades set to an effective cut height of 1 inch. The cultivars that responded the best to the scalping were 'Barbados', 'La Paloma', 'Mohawk', 'NuMex Sahara', and 'SR 9554'. Notably, the cultivar 'Yukon' greened up 11 days sooner than any of the other varieties, regardless of scalping.

MANAGING MISTLETOE

HOW IT GROWS

Leafy mistletoe is a common sight in trees in the San Joaquin Valley. There are two species of mistletoe in our area, *Phoradendron villosum*, which affects oaks, and *P. macrophyllum* which affects a variety of trees including ornamental pear, maple, ash, walnut, alder, and sycamore. Although a mature, healthy tree may tolerate a few mistletoe plants, heavy infections of trees increases water stress and may cause dieback of branches or weakening of the entire tree to the point of becoming susceptible to other diseases or death.

Broadleaf mistletoe, as it is sometimes called, is a parasitic plant that produces its own food through photosynthesis, but requires a host plant from which it extracts water and minerals. It does this by sending root-like structures called haustoria through the bark into the tree's fluid-conducting tissues. Once inside, these structures can extend quite a distance from the point of infection. As



Flowering pear smothered by mistletoe

long as the tree is well-watered and the infestation is light, the tree survives. However, trees can't regulate the extra water being transpired by the mistletoe, and if a tree is drought stressed branches may die outward from the point of infection. Numerous mistletoe plants on a stressed tree can be a cause of tree mortality.

Mature female mistletoe plants produce nutritious white berries that are a favorite of robins, bluebirds, thrushes, and waxwings, among others. Birds have been known to defend mistletoe plants to prevent other birds from eating the berries. Mistletoe infections occur when birds eat the berries from nearby fruiting mistletoe plants and deposit them unharmed from their digestive tract onto a tree branch. The seeds have a sticky coating that allows them to adhere to the branch while they send out the haustoria to find a thin place in the bark from which to launch their attack. Birds prefer to perch in large trees, so most mistletoe infections occur in larger, older trees. Since birds can spend quite a long time in one tree feeding on the berries, one infection begets another!

MANAGING INFESTATIONS

The first step to management is prevention by planting trees resistant to mistletoe if you are in an area with a high level of infection. Among these are Bradford flowering pear, Chinese pistache, crape myrtle, eucalyptus, ginkgo, golden rain tree, liquidambar, and sycamore. Avoid particularly susceptible species such as Modesto ash and Aristocrat pear. When planting into a new area, it is important to prune out any infections in surrounding trees, and whole

neighborhoods may need to cooperate to gain control.

Mechanical control refers to cutting out infections, and the best control is achieved when plants are removed before they are mature enough to produce seed. Maturity typically requires two or three years. When new infections are quickly removed, control is much more satisfactory.

If branches are not too large, and proper thinning cuts can be made, the best control is achieved by removing the entire infected branch at least 6 inches below the point of infection, or further if the mistletoe plant is several years old. When branches are too large, or their removal would harm the structure or looks of the tree, the mistletoe can be cut off flush with the branch. However, the leaves will re-grow within a year, and the mistletoe will need to be removed again before it sets seed, usually within 2 to 3 years.

Some success with preventing re-growth has been seen with branch wrapping. This is done by first removing the plant flush with the branch, and then loosely wrapping black polyethylene (garbage bags or weed barrier) one foot in both directions from the point of infection and tying or taping the ends. The exclusion of light eventually kills the haustoria beneath, usually within two years. Combined with control of mistletoe in surrounding trees, this practice can help to significantly reduce occurrences of infestation.

If wrapping is not feasible, and branch removal is undesirable, at the very least mistletoe infections should be cut from trees before they become harmful or widespread. In the case of severely infested and weakened trees, it may be preferable to remove them and replant with resistant species. Careful practices and diligence are required to gain control of this parasite and preserve the beautiful trees of our urban forest.



Reduce Greenwaste

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PLANT THIS - *in the right place.*

Pineapple guava, *Acca sellowiana* (formerly *Feijoa sellowiana*), is a large, hardy, drought-tolerant, evergreen shrub. It has thick, tough leaves that are grayish green on the underside, and showy flowers in spring.

This plant grows slowly to a mature width and height of 15-25 ft., depending on soil and moisture. When mature, it can be pruned up to make a low-branching, small multi-trunked tree that is suitable for under power lines. It can also be used as a border hedge, or a specimen plant. It will take pruning to shape, but if planted in the right place should require a minimum amount of care.

As with all plants, it should be established on regular water to allow it to develop its root system. Once established it can be watered deeply every two weeks, or on an auto-timer using an ET_0 of 20-30%.

If growing for the fruit, it should be watered regularly, grown in full sun, and one of the following varieties planted: 'Beechwood', 'Coolidge', 'Mammoth', or 'Nazemetz'.



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

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