Master Gardener
Sonoma County

Care and Maintenance of California Native Plants

PLANTING SEASON

The optimal time for planting ALL plants of the Californian Floristic Province is in late fall. Soils are still warm (not hot). The capillary movement of water is upward (toward the soil surface). The nights are cool (promoting less shoot growth and more root growth). The days are typically cooler (leading to less stress on the plant). The overall cooler and moister conditions are less favorable to many of the soil pathogens that are much more likely to infect the broken or damaged root system (inevitable during planting). In our particular area (the North Bay Area) this means that late September to November is the beginning of the planting season. Prime planting time is October to late November and February to March. Many plantings can and have been successful when planted outside this time period, but they generally require much more care and attention.

Annuals: plant from October to late November.

Trees and Shrubs: plant from October to the end of February.

Subshrubs and Perennials: plant from late October to November and from February through April.

Riparian plants of all sorts: plant at any time of the year, though best and easiest when planted from October to the end of February.

GENERAL

For best appearance of your plants and garden, dead-head regularly. If you want the plants to seed around. be sure to let plenty of seeds mature.

Always do a seasonal general clean up of the garden. Remove dead, dying. or diseased plants. Renovate the mulches. Clean-up piles of shed leaves and branches. Remove dead wood from trees and shrubs.

WATERING

Watering your plants will be the single most important factor influencing the success of your California native plants. Proper siting (placement in the garden) and planting (installation) are equally important, but are one-time events. Watering is an ongoing concern through the life of your garden. Typically, you spend a lot of time and money on your plants and water. Make sure that you are not wasting your money and effort. Therefore:

Check your soil! NEVER keep to a strict, automatic schedule unless you have developed it through long site specific experience.

Check the moisture of the rootballs of newly planted plants as well as the surrounding soil moisture on a regular basis. Depending upon your soil and the plant's container mix, it is possible for the soil to be damp to moist and the rootball may be totally dry (this condition is usually associated with heavy soils) Always be sure that the rootball of newly planted plants is moist (not wet), to help encourage the roots to grow into the surrounding soil.

Don't water if the soil and the rootball are already moist.

If a plant is wilted, check the soil. If the soil is moist, do not water —cut the plant back instead. If the soil is dry, water.

In our area, micro irrigation is better than drip irrigation because you can see what is being watered as soon as you turn it on. You must, however, check to see that it is working properly (at least once a week).

Overhead watering is not a sound practice in coastal gardens or in central or northern California, due to the numerous leaf-spot and other fungal pathogens that are encouraged by moist wet warm conditions. If this is your only option, consider changing your system or garden type. If you must use overhead watering, do so only in the early morning so that the plant's leaves will be dry by nightfall.

WEEDS

Weeds are any plants growing where they are not wanted. In our area we have three types of weeds: cool season growers (most of the annual grasses, mustard, popweed, Galium. etc.). warm season growers (spurge. Conyza, pigweed. etc), and all season growers (Marrubium, nettles, Lactuca Sonchus, etc.). To control weeds. employ the following methods:

Weed by hand. This is a good safe method and lets you see exactly what is going on in your garden.

Use mulches. The weeds that come up through the mulch are generally easier to weed out.

Use pre-emergent herbicides. Use these with care, as they can build up in your soil and cause problems. If used with caution. they are a good idea. NEVER use pre-emergent herbicides in areas containing bulbs (especially dormant to sprouting bulbs), as most will kill the bulbs.

Post emergent herbicides. Again. use these with care. Some garden plants are especially intolerant of any exposure to these chemicals (like ferns).

VERTIBRATE PESTS

Rabbits. squirrels, wood rats, deer, ground squirrels, moles, gophers, voles, mice, raccoons, cats, dogs, opossums, and birds can be a problem in a garden, especially when you are trying to establish new

plants. Always know what pest you are dealing with, so that you can take appropriate measures to control their activities. In the best of all possible situations, the garden will have an impenetrable fence or wall protecting the plants, but since this is rarely the case, provide secure and appropriate individual cages for the plants or plant groupings. (Smaller mesh keeps out smaller creatures. Creatures that climb or fly will not be deterred by fences or cages without secure tops. Creatures that burrow or dig will only be deterred by underground caging.)

UNUSUAL CASES

In certain situations it may be necessary to go to unusual extremes in getting plants to establish:

Extreme heat and sun — provide the plant with a sunscreen to the southwest of the plant to give it some protection at the hottest part of the day. We have used burlap stapled to three pointed stakes.

Wind — provide the plant with a wind screen placed between the plant and the direction of the problematic wind. Larger specimens of newly planted trees and shrubs may require secure staking. Never tie a plant rigidly to a stake, there should always be a certain amount of movement allowed so the stem/branch/trunk will develop the proper taper so it can support itself as it matures.

New developments where all the surface soil has been removed, leaving unimproved subsoil as the garden surface — this is an exception to the general principle of not adding soil amendments. These soils have none of the necessary microbes and fungi necessary to promote sound plant growth. Do amend the soils with organic material. Do install plants that have had micorrbizal fungal inoculation.

Gardens that have been treated with soil sterilizers will benefit from installation of plants that have had micorrhizal fungal inoculation

PRUNING & PINCHING

Most native plants will benefit from occasional corrective pruning, and all will benefit from the removal of dead wood.

Regularly remove dead material and branches from your trees and shrubs.

Be sure to remove the dead branches from deciduous trees and shrubs before they have lost their leaves. It is much easier to see the dead branches in this context.

Prune native broad-leaved evergreen trees and shrubs in early summer. This reduces the plant's need for late season water in addition to shaping or directing future growth.

Pinch new growth often if/when a denser, fuller plant is desired.

FERTILIZING

As a general rule, most native plants do not require much additional fertilization, particularly when grown in heavy soils. But, in older gardens or gardens with sandy-gravely soils some fertilization may be beneficial. Remember, the vast majority of these plants get along just fine without fertilizers in the wild.

When fertilizing, always use a fertilizer with a low first number (nitrogen) on the label. Always apply the fertilizer at 1/2 to 1/3 the recommended dose.

The best time to apply fertilizers for our broad-leaved evergreens and perennials is around March -April in our area (as the new growth emerges). The best time to apply fertilizers for our native deciduous plants is as they leaf out in the spring. However, most of our native deciduous plants will not need fertilizers. (In our garden, we do fertilize the deciduous oaks [roughly every other year], particularly those growing in our sandy,-gravely soil.)

MULCHING

Mulching your garden will help control weeds, moderate the temperature of the soil, and encourage gas exchange to the roots by preventing the formation of a dense crust to the surface of the soil. Mulches also aid in preventing soil compaction by providing a cushioning effect over the soil surface.

Always keep organic mulches away from the crown of the plant. Usually six inches away from the base of a small plant is sufficient.

In this area, apply rock or organic mulches about three to four inches deep.

Due to the heat in our area, most organic mulches will decompose in a very short time (often within a single year), and need to be replenished regularly to provide the desired benefits**.**

As a general rule, do not mulch Californian desert plants with organic materials.

Organic mulches will enrich your soil. This is either a good or a bad feature, depending upon what sorts of plants you want to grow and how the mulch will affect the plants (Generally the end result is a higher availability of nitrogen. Nitrogen is a limiting nutrient to most of our native plants, and will encourage excessive quantities of lush new growth that are often not sustainable over the summer months.)

In garden areas without mulches, cultivate (break-up) the soil surface several times during the year. This helps water to penetrate the soil and encourages gas exchange with the root system (especially important in heavy soils). It will also help to control weeds. (What you are doing is, in effect. creating a "soil mulch.")

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