



The North Lake Tahoe Demonstration Garden is an educational community garden which promotes lake-friendly landscaping to help preserve our unique and fragile alpine environment

President's Message

Another Fall and it has been chilly so far. We have been doing things in the garden anyway. You will have noticed that we are expanding into new space and have new raised planter boxes. We have not planted them but may still have time to put in some overwintering plants and will definitely plant in Spring.

Fall is a time when we have to do a lot in a short period of time as the weather can keep us out of the garden many days. This year, we were very fortunate to have help from employees of United Natural Foods, Inc. (UNFI) They were at a conference at the Hyatt and, as part of their employment, they are required to do volunteer work in the communities they visit. So, much was accomplished by the many in so few hours! We are very grateful for their help and their interest in the garden. It gave us a huge headstart in our preparations for closing the garden for the winter. We still have some work to do, but our scheduled days may vary due to weather and travel plans by Board members. There is always ongoing work to do and plants to add.

Please go to www.demogarden.org for more information. You can sign up to become a member or a volunteer or see photos of the garden. Check out the website and then visit the garden on the campus of Sierra Nevada College. Plant and other information is available in the gazebo. Hope to see you!

- Margaret Solomon



UNFI Volunteers

How much mulch is Enough? *Lagom*, of course!

By Mimi Komito

Several times this summer I was asked the "perennial" question of how much mulch is enough. This often-mystifying question does have an answer, and in my native Swedish, there's even a word for it - "lagom" - which roughly translated means "just enough".

Mulching follows cleaning when preparing gardens for winter. Both in cleaning and mulching you can have too much of a good thing. Although it's critical to clean your garden in the fall, all too often gardeners sweep out the good with the bad. They try to clean up too early or too much, enhancing the appearance of the garden at the expense of its health. Being overly fastidious destroys nutrients needed while plants are storing food in their roots as they get ready to go dormant. On the flip side, by not cleaning up at all you'll deprive plants of a head start in spring by allowing debris to shade the ground from early spring sun. Ideally you should clean up as soon as the weatherman predicts the first major snowfall of the season - October flurries don't count!

To clean up your late-fall garden, rake around shrubs and bushes and discard dead leaves which can harbor disease. This is especially true of wild and hybrid roses. You'll also want to cut back and discard the cuttings of perennials. Some annuals (e.g. sweet alyssum) will reseed themselves if allowed to go to seed before cutting off the seed heads. If you want to save seeds to propagate perennials, bi-annuals or annuals, wait until seeds are fully ripe (dried up) then collect the seed heads (like Rudbeckia, Gaillardia and Echinacea) and sprinkle seeds where you want them next spring. For seeds in husks or pods (like Penstemon, Columbine and Lupine), cut the flower stem, turn upside down and shake out the seeds where you want them to grow (you may have to crush the husk or pod to release the seeds).

Once you've finished cleaning, it's time to mulch. You'll need a well-rotted commercial or home-made compost as well as other plant material such as pine needles. In the past I made my own compost, but I gave it up when my compost bin became a bear magnet. Until someone invents a bear-proof composting bin, I'll buy commercially made compost. Depending on how much you need, you can either buy it by the 3-cubic foot bag or by the truckload. Full Circle Compost in Minden will deliver by the truck load - maybe an opportunity to share with a neighbor or two.

In order to "mulch just enough", spread a generous layer (2-3" thick) of compost around shrubs and smaller trees and over flowerbeds (even turf benefits from a 1" layer before winter). If you feel the need, you can rake the compost into the soil a little, but it's generally not necessary. The freeze-thaw cycles during the winter moves rocky soil upwards, automatically working the compost down into the soil. Using compost around plants amends Tahoe's sandy soil and, over time, you'll eventually build up a layer of healthy soil in your garden. I recommend amending the native soil with compost rather than just adding topsoil to flowerbeds. Compost adds nutrients and promotes micro-organisms in the soil, which will greatly benefit your plants. If you're lucky you'll even get an earthworm or two!



End of the Season Tips

by Janet Steinmann

→ Plant trees, shrubs and perennials until you can plant no longer because of snow or frozen ground. You need to water at planting and until the weather makes plants dormant. Dormancy means that the plant can concentrate on its roots without worrying about reproducing itself by making pollinator-attractive flowers and then producing seeds. (Let's face it, wouldn't we all enjoy an occasional dormancy?)

Over winter, if a warm spell melts the snow for more than a few days, watering may be necessary, especially for new plants. The idea is to keep the roots in a moist environment so they can grow and establish themselves under the soil, and our Tahoe snow blanket usually accomplishes this. But new plants may need attention, depending on our freeze/thaw temps this winter.

→ Mulch flower beds and new plantings with (non-diseased) leaves, pine needles, or divide irises and daylilies into sections that have some roots, and replant. (Plant the iris rhizomes very close to surface, almost exposed.) Many neighbors who understand that this division is invigorating for their plants and will result in more flowers will appreciate the help in dividing and be happy to share parts of thriving, beautiful plants.

→ Collect seeds from your autumn perennials and annuals - rudbeckia (various Black-eyed Susan), sunflowers, Galathea (Indian Blanket Flower), Echinacea (Purple Cone Flower), and hardy asters. (Too late for lupine or California poppy seeds.) These late summer flowers will spread themselves to some extent, but you can enjoy saving some of the seeds for spring or just till them lightly into the soil this fall. If the seeds "take" they will grow roots over winter and bloom earlier than those planted in spring.

→ Tying up trees and shrubs is always questionable for mountain gardeners. You see aspen and mountain ash and other natives tied up with by landscaping companies, and this certainly can't hurt. But is this really necessary for these hardy trees?

In my experience, most resilient native plants like aspen, Mountain Ash, and serviceberry don't need this protection. If they lose many branches in winter snowstorms, they are probably planted in the wrong place, maybe too vulnerable to highway snow load or hillside wind, but they will probably survive and make baby trees.

However, if you have a special, beloved plant that you want to protect, then tie and mulch and protect as much as time allows. I have cherished and protected a redbud for many years and it rewards me with golden heart-shaped leaves every fall (very few redbud flowers, however.) Or if you have some beautiful (and expensive) Japanese maples, plant them far from any snow-load roofs, etc. or keep them in pots that you can protect from winter damage.

→ Don't prune lilacs, crabapples, flowering plum or other spring blooming shrubs and trees. They have already started forming buds and you will cut off the new blossoms.

→ Autumn is a great time to weed, if you can still dig into the ground. Get the unwanted clover and grasses out before they have an entire winter to develop root networks (yes, this is what they do under the snow. We encourage this activity with perennials but not with weeds.)

→ Perennials in containers can be left outdoors with a pine needle mulch but don't just forget about them since they will dry out more quickly than those planted in the ground. Water occasionally if we have no precipitation.



Flower bouquet from our Butterfly Garden

Spring Blooming Bulbs for Tahoe

By Mimi Komito

Daffodils, Snow Crocus, Grape Hyacinths and the like... We all love to see these cheery harbingers of Spring. Now is the time to get the bulbs in the ground for a spectacular Spring show!

The Spring bulbs which do best in Tahoe are Daffodils (any Narcissus variety), Grape Hyacinths (Muscari), Scilla, Snow Drops (Galanthus), Early Snow Glory (Chionodoxa) and some Crocus (Snow Crocus seem less palatable to squirrels)



Daffodils



Grape Hyacinth



Scilla



Snow Crocus

Sadly, most Tulips are equal to a salad bar for squirrels and chipmunks. The only tulips that seem to escape the squirrels' interest are the "lesser" varieties. They are generally short-stemmed and the flower has an open lily form. Tulipa Kaufmanniana, Tulipa Turkestanica, Tulipa Greigii, Tulipa Tarda and Tulipa Humilis are some I have grown. They are mostly available through catalogues or online. They may be short but they make up for it in profusion of blossoms.

Most bulbs can be planted as late as the ground can still be worked (I've been out there with a pick in November). In general, they should be planted 3 times the height of the bulb, but they don't seem too picky and if you can't dig deeper than twice the height, they will most likely be okay. Make sure to plant the tulips with the pointy end up.

Bulbs should, ideally, be planted in full sun for best flower, although they can be planted under deciduous trees and larger shrubs since they will bloom before the trees/shrubs are fully leafed out. They look their best planted in larger groups of 7 bulbs or more per grouping

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Orchid Bloom Again FAQ Orchid Won't Bloom? 5 Reasons Why

By Millie Szerman

#1 - Light

Overall, the most common reason that orchids fail to bloom is insufficient light. The Phalaenopsis and Paphiopedilum orchids are usually happy with the filtered light in a windowsill but many other varieties need more light than that. Dendrobium, Cattleya, Oncidium and other medium to high light orchids may need supplementary grow lights or time spent outdoors in the summer to get the kind of light levels they require to bloom. Orchids are not like tomato plants, the vast majority cannot handle full sun. Dappled shade is ideal and even though a bright window seems like more light than outdoor shade, it is not.

As an orchid gets more light, its leaves turn a lighter shade of green. Very light yellow-green leaves usually indicate too much light where very dark forest green leaves can indicate too little light. In summary, if you have a Dendrobium, Cattleya, Oncidium, Cymbidium, Vanda, Brassia or other high light orchid growing indoors on a windowsill and it has not bloomed in a year or two, chances are a lack of sufficient light is the reason.

One approach is to take orchids that require high light and put them in a Vanda basket hanging from a tree branch. Higher humidity supplemented with sufficient watering allows high light orchids to have a vigorous growth season. We've seen dendrobiums re-bloom with this kind of treatment even after they have languished without blooming on a windowsill for ages. The key to getting the bloom was more light.

#2 - Roots

Good roots bring good blooms. An orchid may have deceptively beautiful leaves with a root system that is in dire trouble. Often root trouble is the result of overwatering or lack of repotting. Orchid roots need oxygen to survive and without it, they smother. The media that orchids are potted in is not like the dirt that traditional houseplants are potted in. Even the best orchid mix breaks down over time and requires replacement. Often times, fear of the repotting process will cause people to leave an orchid in the mix for far too long. This may be preventing the orchid from having enough stored strength to bloom.

The selection of a top quality orchid mix is of the utmost importance. There are plenty of choices, and orchid bark is one of the best I've found. Watching an orchid carefully can give clues to trouble at the root zone. When you buy orchids at the store, they are typically quite young. Over time, each new leaf or pseudobulb should be bigger than the previous one or at least the same size. This determination can typically be made when the next new leaf or pseudobulb begins to form, or the plant goes into its bloom cycle.

#3 - New Growth

There are two types of growth patterns for orchids, sympodial and monopodial. The monopodial orchids, Phalaenopsis and Vanda being the two most common, grow up off a single central stem with leaves on either side. We expect to see each leaf be at least as big as the leaf before it and hope to see at least one or two new leaves per year. The next bloom spike on a monopodial orchid comes from the base at the underside of a leaf, usually 2 or 3 leaves down from the newest leaf and on the opposite side as the prior bloom spike. In order to keep blooming over the years, monopodial orchids such as Phalaenopsis need to put on new leaves each year. Over time, as the orchid grows in size and strength, it will send out a bloom spike on each side of the stem simultaneously.

Sympodial orchids have multiple growths and usually grow one or more new growths per year. Often the growth pattern looks like a corkscrew with each new growth coming from the side of the one before it in a circular pattern. For example, a young orchid which is purchased in bloom might have 4 or 5 stalks, most with leaves, with the bloom coming from the largest stalk. These "stalks" are actually called "pseudobulbs". If the orchid does well, you can expect to see a new pseudobulb emerge from the base of the previous pseudobulb near where the orchid bloomed. During the leaf and root growth period (not the bloom period), usually in summer, this new pseudobulb will ideally grow to be at least as big or bigger than the one that just bloomed. The next bloom spike will come from this new pseudobulb. You are looking to grow the biggest, healthiest new pseudobulbs possible as they will be the source of the next season's bloom. Ample light, food and sufficient water are keys to healthy new growth. Over time, as the orchid grows in size and strength it will grow multiple pseudobulbs which can all spike at the same time creating an abundance of flowers.

#4 - Season

Each orchid type has a time of the year when it naturally will bloom. This may not be the same time of year that an orchid was blooming when it was purchased, as nurseries can force orchids to bloom off-cycle. Plant labels can be very helpful in recording bloom cycles. Most orchids grow during the summer and bloom in the fall, winter or spring. Knowing the season that an orchid blooms helps alleviate the frustration of feeling like "It's July, why isn't my Phalaenopsis in bloom again now?" For example, the Phalaenopsis orchid is most likely to grow new leaves in the summer and early fall, and set a bloom spike in late fall. The spike will elongate during the winter with blooms emerging in late winter or early spring. There are plenty of Phalaenopsis that bloom off cycle for a myriad of reasons (from genetics to culture) but most will follow this pattern.

Many orchids bloom once per year, some twice or even more. Once in bloom some flowers last weeks or months while others can last only days. Some basic research about the type of orchid will identify what to expect. For example, Phalaenopsis orchids usually bloom once per year and the blooms can last for months. Once the flowers fall off, it may have a couple of extra flowers emerge from the end of the bloom spike (or branch of that spike) and bloom again. If lots of long-lasting blooms are your goal, then Phalaenopsis is a satisfying orchid to grow. Cattleya, Oncidium and Dendrobium usually bloom once or maybe twice per year with spectacular blooms that last a month or two.

#5 - Natural Stimuli

In nature, orchids have natural stimuli that indicate to the plant that the growth season is over and it's time to bloom. Some orchids are temperature sensitive and some are light sensitive. Those that are temperature sensitive are often triggered to bloom by the natural cooling that occurs in the fall. This drop in temperature signals to the orchid that the growth period is coming to an end and it is time to get ready to set a bloom spike. Sometimes orchids grown in our homes where the temperature is fairly constant are deprived of this natural cue and will be reluctant to bloom. Temperatures in the 60's for a brief period (1-2 weeks) are usually sufficient to initiate a bloom spike in the majority of Phalaenopsis. Similarly, light sensitive orchids grown in our homes where lights are on after dark can have their natural cycle disrupted. If these types of plants are allowed to summer outdoors they will usually sense the shortening days and begin the bloom cycle.



Seasonal Splendor

By Janet Steinmann

Our shimmering groves of golden aspen and streams gilt-edged by willows will fade in November. But while much of the country becomes drab and gray in winter, Tahoe enters another stage of seasonal splendor.

Surrounded by snowy mountains, our lake reflects clear blue skies and, best of all, stands of stately Sierra conifers. Sometimes iced with crystal, or on warmer mornings outlined deep green against the brilliance of cobalt sky and sparkling white slopes, the ancient giant evergreens are a dignified and somehow reassuring presence in our mountain landscape.

Those who are too busy to appreciate the beauty of Tahoe's conifers are...well, way too busy.

Native evergreen trees and shrubs adorn many yards, but some gardeners find themselves conifer-deprived. Some of the best trees are available at local nurseries but others are difficult to find. And not all are easy to transplant from your neighbor's yard.

Following is a list of native evergreens that will grow in most Tahoe/Truckee yards:

★ **Good Ol' Jeffrey:** Jeffrey Pines are stately survivalists--you can find tiny "bonzaied" Jeffrey's growing out of boulders. Hug one of these 200 ft. giants (strongly recommended!) and you will smell "vanilla" or "caramel" in the bark. Squirrels make sure that Jeffrey's reproduce - notice the shredded pine cones around your yard and all of the baby pines produced by pine nuts that the squirrels forgot. The Jeffrey seedlings are difficult to dig up and transplant, mainly because they have a very deep taproot. However, you can usually find young trees in local nurseries.

★ **White Fir:** Called a "trash tree" by many local mountain folks, these took over after large stands of pines were obliterated by miners, railroads, timber, and other innocently forward-thinking entrepreneurs of the 1800's. However ubiquitous, the firs are gorgeous evergreens, quintessential Christmas trees (remember the end of "The Little Fir Tree"...sob!?). Mistletoe is a problem, but not insurmountable. I've never seen our native firs in nurseries (hybrids, yes.) They also reproduce all over the place but I don't think the average gardener could transplant one successfully.

★ **Incense Cedar:** This tree is so beautiful at every stage of development and we are very lucky because Incense Cedars are fairly common at the lake and are reasonably easy to transplant, if friends have small ones. Here is what Incense Cedars have going for them:

- Lush, musky-spicy smelling foliage, deep green.
- Many branches in youth ("youth" will last much longer than most of us will), making a fine privacy tree.
- Gorgeous in old age, if you are fortunate enough to have one of the huge old codgers around - large corrugated sienna brown trunks, usually scarred by at least one lightning strike, some say by Native American "controlled burning" at the turn of the century. Gnarled and twisted limbs with a halo of green foliage outlined against the sky.

★ **Sugar Pine:** Not too many left, none in large areas surrounding Tahoe, so consider yourself blessed if you have one. The needles of this awe-inspiring pine are softer than those of the Jeffrey's or Ponderosas, so the tree has a tall, almost delicate silhouette against the sky. The cones are incredibly beautiful - over 1 foot long, polished and smoothly curving, these are the most lovely of Sierra pinecones, all natural works of art as far as I'm concerned. Sugar pine seedlings can be transplanted, although you seldom see them at nurseries. The Forest Service occasionally has these and other transplants.

Of course, all of these trees are fire hazards if grown too close to the house—they need to be 100 feet from a structure and spaced so that their branches don't touch. But if you are fortunate enough to have some forever-green natives in your yard, do not "kill them with kindness" by overwatering or over-pruning, and certainly no fertilizer or insecticides, please! The trees and plants did very well before humans arrived and will probably continue to grow in beauty and dignity after we are long gone. Our stewardship consists of making sure that their native environment is protected, and considering ourselves fortunate to co-exist with these magnificent mountain evergreens.



Jeffrey Pine



White Fir



Incense Cedar



Spring Blooming Bulbs for Tahoe

(Continued from Page 2)

(no lined up "soldiers," please!) and clustering them against larger rocks will allow them to bloom a little earlier (the boulder will warm up from the Spring sun and melt the snow around it). Plant taller varieties towards the back of a planting and sprinkle the "lesser" bulbs in among the larger Daffodils. Alternate early blooming with late blooming varieties to extend the bloom season.

If you decide to try some of the *species* tulips I've named above, try planting them in between Narcissus. This little trick very often prevents the squirrels from finding the tulip bulbs.

Remember to let the foliage of all bulbs wither down and *die* before you cut them off after they have bloomed. The leaves channel nutrients to the bulbs for next year's flower show. Try inter-planting bulbs with herbaceous perennials in a flower bed. The perennials generally come into their own right about the time the bulb foliage starts looking unsightly and thus will help hide the withering foliage.

So what if you forgot a bag of bulbs in the garage, say, and don't find it until the ground is frozen beyond digging or even using a pick... Well, that's when you turn them into gifts for fellow gardeners. You guessed it, I've been there!

Plant a bulb garden in a large pot (5 gallons or more), using the same techniques as when planting in the ground. Fill the pot to within 10 inches of the top with potting soil. Put larger/taller bulbs in the middle and surround them with alternating groups of 3 Snow Drops and 3 Grape Hyacinths. Water well and cover with a couple of fir (or other evergreen) branches. The pots should be kept outside and allowed a snow cover which will help insulate the pot. Until it snows, they should be given a small drink once a week. These bulbs can, unlike forced bulbs, be planted in the ground next Fall and enjoyed for years to come. When you're ready to gift the pot(s), write care instructions on a card and tuck it into the evergreen boughs. These pots make nice hostess gifts for the gardeners among your friends.

Now sit back, relax and wait for Spring!



Snow Drops

Onions and Garlic and Leeks, Oh My...

By Mimi Komito



Our last Green Thumb class for this season was something completely new for the Demo Garden. David M. Long, a Maser Gardener with UC Davis, came to visit and shared his extensive knowledge of growing edible members of the allium family. As part of the class, he planted a few samples of garlic and onion, which we hope will do well in our Tahoe climate. Before the snow flies, we intend to fill this raised bed with additional garlic and onions.

Each class attendee went home with a sampling of seedling alliums to plant in their own garden. We all agreed to share our results with David to assist in his research on viable food crops for the Tahoe environment.

The allium can be planted directly in the ground or in raised beds and larger containers. I intend to try mine in a large (25 gallon) pot.

As part of his research, David has agreed to facilitate a couple more classes next Spring. Since we just finished several new raised beds in a much sunnier part of our garden, we will use a couple of those for strawberries and potatoes. Both are food crops which do well in our area, if cultivated properly.

We, the Demo Garden Board, are very excited about David's involvement in the food growing part of our demonstration plots.

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