

Marsh Gardens Newsletter

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- Some folks may have gotten a notice about moving some plants in the OML greenhouse. The plastic conduit that was used to house the electric wires is breaking down because of exposure to UV radiation, and now has to be replaced. Unfortunately, this means that plants will have to be moved to accommodate the work being done. The first space targeted by the electricians involved is the first bay to the left after entering the potting area. Eventually, the other bays on that side will be affected, but to minimize the confusion, we are asking the electricians to do one bay at a time, allowing us to disrupt the continuity in stages. The plants should be moved to the bay on the right as you come in the main door.
- In other news, the whitewash has been applied to greenhouses 1 and 2. Plans are being made to do selected bays at the greenhouse at OML next week.
- We are ordering some desert plants, cacti and succulents, to replace specimens that have died. The present situation for them in house 2 is less than ideal because of the high humidity that is a hallmark of the spring-fed stream under that end of the greenhouse.
- If anyone has the time, the knowledge and the inclination, we could use some help in identifying some orchids with no nametags. We are in the process of taking inventory, tagging and entering into the database our greenhouse plants. The end result will be a tidier greenhouse operation, better record keeping, but also the de-accession of some plants that haven't been identified.
- We are working on a job description for a student employee for the summer, so if you know a good hard working person who is not afraid of the heat and humidity, terrible working conditions, testy co-workers, poison ivy and numerous other hazards, let us know.

Our second Plant of the Week is the lowly Dandelion. It is symptomatic of the American obsession with lawns that this powerful survivor is held in such disdain. The binomial for this plant is ***Taraxacum officinale***, and it is a member of the Cichorium Tribe of the Sunflower family, Compositae. There are some 50 species in the genus, with hundreds of apomictic forms out there.

The common name derives from the French for Lion's teeth (*Dente de leone*), which is a phrase used to describe the leaf margins, although this is variable, with many plants with entire leaves. The genus name comes indirectly from the Persian, *talkh chakok*, a phrase meaning 'bitter herb.' It 'morphed' into *tarasacon* in medieval Latin, and finally to its present form.

As I mentioned earlier, this plant would put those poseurs depicted on the Survivor show to shame. It will thrive in the worst soils, in full sun, deep shade, in hot climes and frigid. It sends its seeds, familiar to all of us as particles of the 'blowballs,' thither and yon using the wind as its dispersal. But it also propagates asexually with an alacrity that would make a cleric blush. Even the tiniest piece of root has enough meristematic tissue and strength to reproduce itself, given time. This is why it is so important to get the root, the whole root and nothing but the root when weeding this plant.

Dandelion is a perennial, which means it comes back from the root every year if left undisturbed. It produces numerous flowers, starting in spring with a flush of bloom, often with a dozen flowers on one plant at different stages of seed production. Pollinated

mostly by insects, they are also self-fertile. As the summer progresses, the Dandelion doesn't let the fun part of reproduction stop: it continues to bloom, but more sparsely, until the first killing frost in the fall.

Dandelions will grow anywhere, but the seeds need disturbed soil, or just dirt that is bare, to germinate well. This means that the best cultural technique for minimizing Dandelion encroachment is to maintain a thick healthy turf (if that's your thing), to mulch and to promote good growth in your garden beds.

While I don't like Dandelions in the garden, I'm not a big turf-grass promoter (in case you couldn't tell), and I have to say I admire the little buggers. There are also some good things about Dandelion. The flowers make an excellent wine. I made several gallons last spring that are just coming into their own. The 'nose' is definitely botanical in nature, the taste is delicate and this crisp white wine is excellent with the more 'aromatic' of the seafood. As well, the flowers yield a clear yellow dye.

There is at least one other possible use for Dandelions, and this story is redolent of corporate greed, global bio-epidemiology and government conspiracy.

After the discovery in Central America in the 19th Century of the important source of latex from the Rubber tree (***Ficus elastica***), the American corporate response was to propagate this plant asexually by the thousands. Literally hundreds of plantations, covering thousands and thousands of hectares were planted with the off-spring of only a few plants, creating a genetic monoculture that presaged disaster.

Indeed within twenty years, a virus began its onslaught, and it didn't take but a few years for literally all of the New World plantings to be decimated. Fortunately, they isolated the pathogen pretty quickly, and thus were able to control its spread to the Asian plantations, which were also equally at risk, having been propagated from the same limited germ plasm as the originals.

But then along came the Second World War, and Japan's push into Southeast Asia. The control of the world's rubber was at stake, and there seemed no way out but to develop alternatives. Rubber substitutes were developed and tested, from laboratory and agronomic sources. About this time, the U.S. government got wind of the efforts by Russian scientists to make a rubber substitute from the white 'latex' that emanates from the Dandelion.

A nationwide push was instituted, providing seed, information and subsidies to farmers interested in helping the war effort. Unfortunately, this effort failed, for several reasons, and within a short time, oil-based and other synthetic substitutes for rubber were developed, leaving a huge seed bank for future suburban home owners to deal with.

The reality of trying to control Dandelions is a nightmare. As I mentioned, pulling them is one way to deal with them, but the risk is great that meristematic tissue will be left in the ground, and it is also obviously labor intensive. There are numerous herbicides on the market that will control this plant. I found that picking the blossoms for Dandelion Wine was only marginally effective at controlling their spread: The plant's response to having its bloom picked was to produce more blooms, something every gardener is aware of who has dead-headed her or his perennial or annual offerings. So the news is not good for those who must get rid of their Dandelions. But whatever you do, please do it with respect to an amazing survivor, a plant whose relationship to our species is a mixed blessing.

