



ARBOR DAY Plant a Tree

Arbor Day has a long history dating back to 16th century Spain. It was first observed in the United States on April 10, 1872, when J. Sterling Morton, a Nebraskan newspaper editor, statesman, and tree lover, successfully urged Nebraska to set aside a day to encourage the planting of trees. It is reported that over one-million trees were planted that day. It became a public holiday in Nebraska in 1885 when the day was changed to April 22nd in honor of J. Sterling Morton's birthday.



The Arbor Day Foundation was founded a century after Arbor Day was first observed "to inspire people to plant, nurture, and celebrate trees." In 1972, former President Richard Nixon proclaimed the last Friday in April as National Arbor Day in observance of its 100th anniversary. Arbor Day is celebrated on this date across the United States and around the world, with the exception of a few states who observe it on dates that are more appropriate to local tree planting seasons.

National Arbor Day is recognized as a holiday to encourage the planting of trees and to recognize their importance. Many communities have also taken advantage of the event to organize other environmentally oriented activities.

ALLERGENS

An allergen is any substance that causes an allergic reaction in people. Among the most common triggers of seasonal allergies, pollen is at the top of the list. Pollen is the granular powder produced by flowers, trees, grasses and weeds to fertilize plants of the same species. Although pollen release is typically referred to as "allergy season," changes in climate conditions and expanded landscape plant palettes, have rendered the occurrence a year-round event, especially here in Southern California.



The conditions were in place to create the perfect pollen storm in the spring of 2019. The event received media attention as scores of sightseers took to the poppy-filled foothills to observe Mother Nature's anomaly. What did not make the headlines were the number of allergy sufferers that were overtaken by the high pollen-count levels.

Pollination is the transfer of pollen grains to the plant's reproductive system, the most common being from one flower to another (cross-pollination). Pollen transference may be achieved by the wind, insects, birds, or other animals and is the foundation of plant propagation and food production. It is a vital link in the biosystem reproductive cycle and is essential for genetic diversity and ecosystem subsistence.

It was discovered in 1676 that plants possess both male and female reproductive system organs in order to propagate. A



single plant having both male and female part flowers, such as roses, are called "perfect-flowered" plants and are commonly pollinated by insects (self-pollination). Flowering plants having separate male and female flowers on the same plant, such as pine trees, are called "monoecious" plants.

Separate-sexed plants, either male or female, are called dioecious plants and are common among trees



and berry-producing shrubs. The male plants are pollen producers, which makes them highly allergenic. Female plants are the fruit and seed producers and are not allergenic, but are considered to be "messy" plants because of their dropping of fruit, seeds and seedpods on public walkways. Quality nurseries and garden centers clearly label dioecious plants as being either male or female.

In an effort to create a low-maintenance, "litter-free" landscape, the United States Department of Agriculture promoted a separate-sex tree and shrub propagation program in the 1940s to isolate and eliminate the "messy" female plant species. The program did not however, recognize the importance of female trees and shrubs that are crucial for trapping and removing pollen from the air.

The absence of female plant species not only creates an imbalance in biodiversity, but also generates a population of male pollen producers without the benefits of female plant pollen receptors. The pollen produced by one large male tree is estimated to be ten-thousand times greater than a perfect-flowered tree. The pollen therefore, drifts freely in the breeze for up to several hundred miles, dramatically increasing the pollen count in the air and worsening the conditions for allergy sufferers.

Despite its consequences, the USDA's clonal male plant program is still being practiced today. Environmental Concept works hard to support a balance in the ecosystem with male and female plants, whenever possible, not only for the integrity of the landscape, but to support the people who suffer from allergies.

PLANTING FOR YEAR-ROUND COLOR

Contrary to popular belief, Southern California does experience four seasons. Compared to other areas, spring, fall, and winter seasons however, are typically shorter in Southern California, with summer being the longest. The seasonal markers are also not as obvious, nor do they always follow the calendar year as they do elsewhere in the country. This can present a challenge when selecting plant materials for producing year-round color.



Jacaranda

Landscape design typically combines elements of art and science to create a successful and visually appealing statement – color, being the most powerful element. Color does not have to be limited to flower beds and gardening containers however, color can be presented in many forms including blossoms, foliage, fruit, berries, and bark – each responding to the seasonal changes.



Lampranthus Ice Plant

Planning for a four-season color array takes thought, organization, and knowledge of plant materials & weather conditions. The concept of planting for all-seasons is to select trees and shrubs that reach various stages of coloration at different times of the year. Ideally, the goal is to have a different plant follow as soon as one plant has completed its showy stage.

Plants blossom at different times of the year based on several factors, including weather, temperature, and the amount of sunlight that a plant receives. When creating your tree and plant palette, be familiar with environmental factors, like direct sun, shade, frost vulnerability, drainage, etc., for the areas you are planting. Always research the blooming cycles of the plant materials in your region before making your final selection.



Chinese Pistache

Based on our experience in developing plant palettes for several local communities, we have compiled a list of plants and trees that offer a broad range of year-round color, and which fall into the water-friendly, drought resistant categories.

STAFF FAVORITES

SPRING SPECIALS

Trees

- ▶ Jacaranda - lavender/blue flowers
- ▶ Tipu Tree - yellow flower clusters
- ▶ Western Redbud - magenta flowers

Shrubs

- ▶ Red-tip Photinia - deep red foliage
- ▶ Statice - blue papery flowers
- ▶ Lavender - lavender spikes

Groundcover

- ▶ Lampranthus Ice Plant - bright pink flowers

SUMMER SUGGESTIONS

Trees

- ▶ Palo Verde - bright yellow flower clusters
- ▶ Crape Myrtle - white, pink, red flowers
- ▶ Desert Willow – trumpet shaped blossoms

Shrubs

- ▶ Desert Bird of Paradise - yellow flowers
- ▶ Texas Ranger - lavender flowers
- ▶ Moraea - white accented flowers on stems

Groundcover

- ▶ Lantana - yellow, white, lavender clusters

FALL FAVORITES

Trees

- ▶ Chinese Pistache - orange/red foliage
- ▶ Pear Tree - red/purple foliage
- ▶ Koelreuteria - dazzling fall foliage

Shrubs

- ▶ Pink Muhly Grass - pink plumes
- ▶ Bulbine - yellow/orange spiked clusters
- ▶ Mexican Marigold - yellow flower clusters

Groundcover

- ▶ Creeping Myoporum - lush green foliage

WINTER WINNERS

Trees

- ▶ Oregon Grape - mahogany-colored foliage
- ▶ Toyon - red berries
- ▶ Fern Pine - willowy, dense green foliage

Shrubs

- ▶ Pyracantha - red berries
- ▶ Iceberg Rose - variety of colored flowers
- ▶ Little John - bright red bottlebrush flowers

Groundcover

- ▶ Rosemary - light blue flower clusters

PROPER PLANT - PROPER PLACEMENT

Landscape design and irrigation concepts have changed in recent years as landscape professionals and communities adapt to water conservation measures. Selecting low-water use plant materials and utilizing an efficient irrigation system are key factors that contribute to the overall success of the project. The majority of redesign projects are targeted at turfgrass removal. The projects have been motivated by turf replacement program incentives available through local water districts.

Each project area has its own unique qualities, including physical characteristics (size, shape and slope) and microclimate attributes (sun, shade, heat and cold). All plants have a tolerance threshold for exposure to the environmental elements. Identifying where the conditions exist within the project area and applying this information contributes to selecting the proper plants and determining the appropriate plant locations.

Knowing the watering needs of the selected plant materials also contributes to proper plant placement. Grouping plants with similar moisture needs by creating hydrozones helps to ensure plant success. Drip irrigation is the go-to system for turf replacement projects. It addresses the need for creating individual hydrozones and can easily be adapted to a conventional spray system. Drip tubing is also an efficient method of delivering water at a constant water pressure and delivery rate.

Environmental Concepts has completed numerous turf replacement and water conservation projects for the communities that we serve. Our staff has an extensive plant knowledge-base and is experienced in evaluating existing site conditions, which have contributed to the success of these projects.

