



## SHEDDING LIGHT ON SUN & SHADE

### Plants for Full Sun

Knowing the sun and shade patterns and understanding the light needs of plants is critical for landscape design and plant selection. Nurseries identify the light requirements that each plant needs to survive, labeling them according to full sun, partial shade, or full shade. Full sun is considered direct sunlight for six or more hours per day. Partial shade is defined as no more than two hours of direct sun each day, with full shade being less than one hour of sunlight each day.

Increased exposure to direct sunlight, especially during the peak summer months, contributes to heat stress in plants that have not adapted to these kinds of conditions. Full sun can quickly burn, wilt or kill plants. When this occurs, there are no defenses, including overwatering, to prevent damage or plant fatality. Therefore, native plant materials are recommended, given that many are drought resistant and can also tolerate full sun.

There are several varieties of perennials used in our area that not only require full sun, but thrive in it. Here are a few examples of plants that we have found to be successful in our local communities. **Groundcover:** Rosemary, Lantana, Dwarf Coyote Brush. **Shrubs:** Japanese Privet, Pittosporum, Texas Ranger, Shiny Xylosma, Red Tip Photinia.

Although many plants are identified as tolerating full sun conditions, direct sun in the Pacific Northwest is in stark contrast to full sun in Southern California. We recommend purchasing plants from local nurseries.

## Celebrating Our 20th Anniversary

Environmental Concepts Landscape Management, Inc. is proud to announce our twentieth year as a full-service, landscape maintenance company.

EC's story began when Ron and Sherry took a leap of faith and decided to open their own company in 1999. "We began as a small firm with one vehicle and a ten-person crew." EC has now grown to over 230 employees, serving communities in Riverside, San Bernardino, and North San Diego counties. To this day they maintain daily input and oversight of the operations so that they can continue to deliver better quality and service that our customers can count on.

Over the course of 20 years, we have witnessed significant changes and encountered challenges along the way. During times when communities were faced with the challenges of record heat and below normal precipitation, we were able to adapt quickly and provide value-added services to assist in obtaining grants for communities.

We are thankful for the clients that have been with us from the start and those that have joined us since then. While we have grown during the last two decades, we have made sure to manage this growth so that we don't lose our original goal of remaining in touch with our clients and committed to our original purpose.

We are thankful for the many team members that began with us back in 1999 and continue to work along side us today! We have been enormously blessed to have had some hard-working individuals that have made EC their home and we have

been part of their journey as they have grown in their profession from irrigation techs to Account Managers.

The greatest benefit that we provide to our customers is that we are just a phone call away. Because we are a family-owned and operated business, we can respond quickly to your requests and we have the talent, equipment, and experience to serve your needs.

The most important values we follow when serving our family of clients are integrity and dedication. We combine these principles to ensure excellent quality and unmatched follow-up.

We bring significant value to the communities we work with because of our highly-skilled, well-trained staff. It is because of their enthusiasm, support, and dedication that we have become experts in the landscape maintenance industry.

Our success story would not be complete however, without the support of our customers. We are grateful to them because they have trusted us over the past twenty years to provide excellent service and quality finished products. It is through continued communication, exchange of ideas, and feedback that we have been able to apply our knowledge and skills to improve the quality of landscape care to the communities we serve.

We intend to continue growing our business relationships and are committed to providing nothing less than the best to our customers. We look forward to another productive year in serving the needs of our clients.



## RAIN GARDENS - "Slowing the Flow"

As communities continue to develop, more vacant land is being covered with impermeable surfaces such as roads, parking lots, and sidewalks. This added pavement results in an increase in stormwater runoff, a reduction in water quality, and a decrease in groundwater aquifer recharge. Stormwater, which once soaked into the ground, now runs directly into the storm drain systems and eventually into nearby streams and waterways, carrying pollutants and debris with it.

A common practice being used to "slow the flow" of stormwater runoff is the construction of on-site detention basins and rain gardens. The goal of slowing and capturing rainwater on-site is to allow the water to percolate into the soil rather than letting it run directly into the storm drain system. Large basins can be seen adjacent to commercial and industrial area parking lots, where water is directed from the paved areas into the basin.

On a much smaller scale, rain gardens are used in the yards of residences as a method of collecting rainwater from roof gutters and downspouts. They are environmentally sound, a sustainable solution to residential and urban storm water runoff, and are also an attractive addition to any landscape design. Rain gardens consist of a meandering swale or depression, lined with river rock, grasses, or other vegetation, that direct water away from structures. They can absorb runoff more efficiently – as much as 30 - 40% more than a standard lawn.



The majority of new homes constructed in urban areas provide proper drainage away from the house, making it easy to locate existing drainage routes in the side

and front yards. Rain gardens can easily be adapted to fit into an existing landscape design by following the established drainage patterns. They can be located within an existing lawn area or they can be an independent feature in a water conser-

vation project.

The variety of materials used in a rain garden will depend on its function and intended design statement. A dry creek bed style drainage swale, lined with gravel and rocks, is a common element used to decrease runoff volumes and increase percolation. Broadening and deepening a section of the channel creates a basin that will slow the flow of runoff, detain water, and allow water to percolate into the soil.



Unless the rain garden is constructed as a means of detaining water, the ability of the plant materials to tolerate high moisture is not a factor in determining the plant palette. Plant materials tolerating both moist soil and drought conditions would be a necessity in the area of the detention basin.



In addition to creating an aesthetically pleasing landscape element, rain gardens offer many other benefits. They act as a pollution filter for runoff and contribute to recharging local groundwater resources. They also improve downstream water quality, provide positive drainage away from structures, and create a valuable habitat for birds, insects, and other animals.

Based on Environmental Concepts experience in designing and constructing detention basins and rain gardens, we encourage the use of these facilities within residential communities and on commercial properties. When looked at individually, these amenities may seem minor in comparison to the 'slow the flow' big picture. However, collectively they produce substantial neighborhood and community environmental benefits. Moreover, they can improve water quality and reduce pollution reaching creeks and water ways by as much as 30%.

## MICROCLIMATES

Each region in California has its own unique climate zone based on a combination of factors including temperature range, precipitation, wind conditions, and humidity. Of the 24 climate zones defined in the Sunset Western Garden Book, California falls within 20 of them, due to its size, extensive coastline, and geographic diversity.

The two climate zones that pertain to the Inland Empire are zones 18 and 19, which are classified as Southern California Interior Valley Cold Zone and Southern California Interior Valley Thermal Belt, respectively. The weather in this region is highly unpredictable and can be extreme, with temperatures exceeding 100 degrees during the day in the summer and below freezing during the night and early morning hours in the winter.

There can also be a myriad of smaller climate variations within the larger climate zones known as microclimates. A microclimate is a set of atmospheric conditions that occur locally which differ from those in the surrounding areas. The differences may be caused by slopes and other natural landforms, vegetation density, tree canopy, soil types, moisture availability, shade dominance, and exposure to direct sunlight.

When maintaining communities, a key element in the success for plant health is to identify these microclimate pockets. Our staff is experienced in recognizing microclimates and understanding the dynamics between microclimates and plant survival rate in order to adapt accordingly. We are also skilled at making the necessary landscape maintenance modifications and irrigation adjustments to compensate for these extraordinary conditions.

