



Stephen &amp; Kristin Pategas

in the garden by Stephen and Kristin Pategas

## Here Comes The Sun

The day with the fewest hours of sunlight here in the northern hemisphere is well behind us - December 22nd if you didn't notice. Now, the eternal yearly journey to the summer solstice on June 20th is well underway (note these dates vary slightly from year to year). While the tracking of the sun's journey has inspired the creation of mystical antiquities such as Stonehenge, it also has consequences for people and plants. The increased daylight has psychological effects on us, but what does it mean for plants and gardeners? Well, a heck of a lot since there are more hours of sunlight, at greater intensity as the earth has shifted the sun's position higher in the sky.

Just as increased length and intensity on our skin is harmful, it is also true for plants that perform best in shade or semi-shade locations. While a few more hours of sunlight are beneficial for herbs, vegetables and many other plants, more sun will stress many "shade loving" plants that evolved growing under the canopy of a forest of trees. Sometimes, the stress of more sun is counteracted with additional watering - consider that as a last resort. In other cases, the plant's foliage will actually scorch and even new emerging foliage will look bleached since it cannot adjust. We saw this on many properties after the trio of hurricanes in 2004 ravaged Central Florida. Canopy trees overturned and gardens went from shade to sun within seconds.

An interesting phenomenon of the changing positions of the sun through the year is the change in the resulting shade patterns. At the winter solstice, the sun rises and sets in the south very low in the sky. Then, as it is doing now in April, it is creeping towards its highest point in the sky. While the north sides of structures are bathed in shade in late-December, by mid-June the sun kisses them.

When we visit a property, we take these seasonal changes into account and calculate where the sun will strike the plants throughout the year. Structures and trees will affect where the shade is located at various times of the year and we select plants accordingly.

When doing research on plants and their needs, always look for their light level requirements. We find that the most useful plants are what we call "transition plants." They take sun, shade or light levels somewhere in-between and can handle a change in light conditions.

Plants do not care whether it is Daylight Savings Time or Eastern Standard Time. While it upsets our sleep and eating schedules, they get the same hours of daylight whether we move the clocks ahead or back. As we move forward, find June 20th on the calendar and add a note: "Take photo of north side" and label that image "summer solstice." Then note December 21st to look at the same scene. The difference will be enlightening. It may also answer the question as to why some plants in the garden are struggling.



**Above:** Winter solstice with shade (note same birdbath at north wall on right).

**Middle photo:** *Zamia pumila-coontie*, a great sun or shade plant.

**Bottom:** Summer solstice with full sun on north side (note birdbath).

Photos by Stephen G. Pategas/Hortus Oasis.