

## Using Solar in the Garden

Two important elements of a complete garden landscape are lighting and water. Lighting adds interest and safety to the garden after dark as well as making it possible to enjoy the garden after the sun has gone down. A water feature not only adds to the esthetics of a garden, but it meets the needs of many of our most important helpers, the birds, the bees and other beneficial insects. Water helps to bring beneficial insects into the garden and create a healthier and more beautiful environment.

Most solar powered fountains and garden accessories operate off the sun's energy; no electrical wiring is required, the installation is easy and the power is free. To produce electricity using solar energy, fountains, lighting and other equipment use a solar cell or solar panel. This cell or panel simply collects photons within the sun's rays and transforms them into conduction electrons that carry an electric charge through a circuit to the fountain pump or light. Thus, the location of the cell or panel is key to the efficient operation of the pump or light. Solar cells need direct sunlight and lots of it; shady locations will not support solar power, so before installing a solar powered fountain or solar powered lighting, ensure that an adequate supply of direct sunlight is available. If the fountain or light fixture is located in a shady area, you may still be able to use solar power by using a specialized extension cord that allows you to place the solar panel at a distance from the actual fixture. And, to power your fountain or lighting at night or on a cloudy day, battery back-up systems are also available.

Solar fountains are an excellent way of adding moving water to the garden without increasing the amount of electricity used. And, because they don't need to be connected to power mains, there is a lower possibility of an electrical accident occurring in the garden. Creating a solar water feature is not much different than building one that uses electricity. The only difference is that you won't have to hire an electrician to run wiring out to the pump.

There are two basic types of solar fountain pumps available, one with the solar panel built into the fountain unit and another with the solar array mounted separately. A fountain with the solar panel built in is useful for those water

features where a spray is used. Pumps with a separate solar panel are best used for waterfalls, man-made creeks and other water features of this type. Consider adding a battery pack to allow you to run the fountain at night and on cloudy days.

Solar garden lighting is another way to save energy in the garden while creating a safe environment and adding to the nighttime beauty of your landscape. There are many different kinds of solar powered garden lights available, including deck lights, push-in lanterns, spot lights and up lights, solar rope lights, and a wide assortment of novelty items such as statues with built-in lights. Working with a lighting specialist, one can create a lighting scheme for the garden using solar components that gives the same ambience and safety offered by traditional electric lighting. In addition, most home improvement stores offer individual and packaged lighting in combinations to suit any garden need. Once you get your new lights home, all you need to do is lay them out to create the nighttime mood desired, tuck the solar panel in the least visible spot that receives sunlight for the required time, slip the wires under plants or soil and you're ready to impress your neighbors.

Other garden décor items such as solar birdfeeders, solar bug zappers and even solar umbrellas, with the ability to power and recharge equipment such as cell phones, are becoming available as well.

Solar is a great way to add interest and beauty to the garden without increasing the amount of electrical energy being consumed. It's also an easy way to add elements that need electrical power without having to call an electrician and run wiring through the garden. Solar power is safe for children and pets - no trailing cables or need for circuit breakers. It also means you can site features wherever you want without worrying where your main power supply is located, as long as the requisite sunshine is available. And finally, of course, solar power is the 'green' option, allowing you to care for your planet while enhancing your garden.

Solar powered lighting and other garden accessories are readily available at most home improvement stores in the area. Solar powered water fountains are becoming more available in stores. For the best selection of solar water fountains, pumps and/or accessories, you will most likely need to go on-line. There you will find a large selection of pumps to power almost any size fountain or water feature. In addition, there are complete packages available that can be set up and operating in a matter of minutes.

Not only is going solar in the garden a great way to go 'green' and help the planet, it can be a safer, easier and cheaper option than installing the electrical equivalent in your garden. Just think, in a matter of minutes, you can have the gentle sound of a water fountain in your garden and the beauty and safety of solar powered lights and not spend a penny on the electricity to run them! So let's go solar!