

Yard Watering Systems

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Automatic watering systems - Now that summer is really here, there is one addition to my yard that makes a significant difference in growing begonias. This is my automatic watering system for both the yard and the shade house. Over the past few years I have installed an outdoor water system that not only supplies the water that begonias require, but also acts as a temperature control during these hot summer days. Let me describe what I have installed and maybe it will give you some ideas on how to make your plant upkeep easier, and make the plants happy too.

The fenced part of my backyard is approximately one-third acre surrounded by a seven foot wire fence and native woods of oak and pine trees. (The fence keeps out the large deer population that runs wild through our neighborhood.) This area contains my shade house, my "yard" begonias, ferns, day lilies, gingers, various tropical plants, and 20 plus trees of various descriptions. The plants are contained in over 180 feet of flowerbeds that are about eight foot wide. In addition, I have five beds within the yard that are approximately 8 feet by 15 feet. Overall this is approximately 2000 square feet of garden, about half devoted to begonias in the ground or in pots. To water this system by hand would be a difficult task at best; not one I would enjoy. Even the use of garden hoses and lawn sprinklers would be a burden because everything is so spread out. On the other hand, this construction of long narrow flowerbeds is just the thing for an automatic water system.

My watering system begins at an outside faucet, and radiates out to all points within the yard. First I removed a "hose bib" and install a water main that leads to several electrically controlled valves. City regulations require the use of "anti-backflow" valves so I installed six such valves in a manifold and put it under a small wooden shed for weather protection. These valves are opened and closed by an electric control device which determines which valve is opened, when it is opened, and for how long it remains open. Each of the six valves is connected to a separate one inch PVC water line that goes to a separate section in one of the flowerbeds. Once in the flowerbed, the pipe size is reduced to ¾ inch size and run for 30 to 40 feet. Along this ¾ inch pipe, at 8 to 10 foot intervals, I installed lawn sprinklers on risers about 18 to 24 inches high. A single water line will flow about 10 gallons per minute (gpm) of water at normal house water pressure (25 to 40 psi) so each line has 4 to 6 spray heads total. The water spray from each sprinkler head overlaps the water spray from the next sprinkler, giving sufficient water for either plants in the ground or plants in pots.

If all of the above sounds too complex, I recommend you go to Lowe's or Home Depot and get some literature on installing lawn sprinkler systems. Their literature will explain the fine points of installing a lawn sprinkler, and you can easily adapt this to your begonia beds.

The real beauty of the water system comes in its application. As the year progresses, I am able to adjust the length of time each sprinkler line is on, and how many times a day that occurs. In

April and May when we have mild temperatures and frequent rain, I usually spray for 10 minutes every other day in the early morning. Come August when the temperatures are high and rain is spotty at best, I sprinkle 5 or 10 minutes per line twice or even three times a day; morning, noon and afternoon. These frequent showers give a definite cooling effect due to water evaporation. I have measured temperatures decreased of 5 to 10 degrees F after spraying.

I installed a similar system in my shadehouse using three lines, each with four spray heads. Again I experience a 10 degree temperature decrease after spraying on those hot, dry August days. Finally, the good news is that the begonias know what is going on. They appreciate the higher humidity and the cooler afternoons, and reward me with strong vigorous growth and lots of flowers. Try it yourself; it works.

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