



Drought

As a native Ohioan who has moved to the southeastern United States with stops in Columbus, Ohio (Ohio State), Baltimore (Johns Hopkins), and the Boston area (Harvard), I have never experienced nature at its most relentless until this current drought here in Georgia. During our sojourn in Boston we did suffer through five blizzards during the winter of 1969, but we knew the spring would come and the Massachusetts Department of Transportation would eventually clear the roads (and our back alley after we offered some money and liquid refreshment).

Each day we attend to the weather reports in the newspaper, on the TV, and on the Web, seeking any indication that some small amount of precipitation might, just possibly, head in our direction. As I write this, it has been 16 days since we've had any measurable rain and 60 days since the Atlanta area has received at least an inch of rain. The most surprising aspect of this is that many of our trees, especially the oaks, have remained green until the beginning of November. Still, the drought has changed the pattern of our lives.

First, it began with restrictions for watering our gardens. For years, outdoor watering was restricted to a three-day-a-week schedule based on whether ones house number was odd or even. Then, the watering time was restricted to between midnight and 10 A.M. to reduce evaporation. Then, as the drought became established, all outdoor watering was banned, except one month for new landscape installations. Our gardens are at risk.

We have never watered our lawn reasoning that given a choice of producing a lush sheet of green grass or a variety of flowers and flowering shrubs, we'd rather grow flowers. The lawn has to take care of itself. The guy who cuts the lawn does an annual overseeding to keep things from looking too ratty, but whatever water it gets is gotten naturally. Not so, the flowers. The back of our yard and the forest are equipped with two ranges of ballpark-type

spray heads and a moisture sensor that controls their use. (The sensor is based on a neat technology that uses the expansion of leather washers when they get wet.) But now that we can't use our irrigation system, how are we to cope?

The answer is "grey water," the rinse water from washing vegetables, clothes, and ourselves. This has resulted in a bucket brigade of considerable effort. We evaluated the number and types of plants and chose to worry about those most at risk. The old stands of azaleas and hydrangeas will have to fend for themselves, while newly planted rhododendrons and mountain laurels need to be taken care of. This resulted in a plan with a map that labeled 22 areas with more than 80 plants and a spreadsheet schedule for watering them.

Beyond the three to four gallons of wash water each day, the major portion of our irrigation comes from our washer. After constructing a rinse water diverter from PVC pipe and valves and a storage tank out of a heavy-duty trash container, we capture the rinse from the washer and fill up two-gallon buckets, two at a time, and distribute about a gallon of water to each of the plants. This provides not only needed moisture, but also results in additional exercise because most of the plants at risk are out in the forest. A rough calculation shows that with an average roundtrip of 300 yards to the back of the property, I get over a mile of exercise, half of it lugging four gallons of water at time.

For all our great technology, there are some things that can't be easily engineered. Because the sprawling metropolitan area of Atlanta depends on such a small catchment area for water that flows into Lake Lanier and then into the Chattahoochee river, our region is at risk. The short-term solutions are a couple of decent rains or a tropical storm from the tail end of an Atlanta hurricane, but nothing has shown up recently.

Compared with Tucson, Arizona, where I spent a sabbatical at the Optical Sciences Center in the mid-1980s, Atlanta is a lush green. (The color change startled me every time I traveled back to Atlanta during the sabbatical.) But I wonder how long it will be so? We tell ourselves that this is a temporary problem, but the drought continues. There is a sense of urgency with additional restrictions being added, new bills being prepared for this years legislative session, and many citizens curtailing their water usage. So we will continue to pay the water bill. But what we all are looking for is some free water. Rain.

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