Dry Gardening

by Harvey Baker

In Green Living Journal Issue 2, Jeff Poppen wrote an article “Gardening in a Drought.” This article is a companion to that writing, from the perspective of a small family gardener.

The drought of 2007 affected my garden, but it was still successful. The only watering I did was with a watering can, watering seeds or seedlings until they got established. Any general watering was prevented by my spring’s low water level, but my garden got through the drought well.

As Jeff says, lots of organic matter in the soil makes it a sponge, retaining water for long periods of time. Thirty years of soil development pays off!

My garden is too small for a tractor and subsoiler, but I’ve double dug all my beds by hand at least once or twice over the years. Double digging loosens the subsoil to a depth of two feet below the ground’s surface, allowing water and roots to penetrate deeply. Each plant crop sends its roots deep, adding organic matter and pathways in the subsoil for later plants to follow. By never walking on the beds, the ground stays loose. The plants’ extensive root systems grow deeply, and can find water easily.
I have been mulching for weed control for many years; as Jeff writes, it’s also a valuable practice for moisture retention. I normally use bark chips to mulch my beds, with a layer of newsprint under them to keep weeds from coming up through the mulch. The bark chips are not as harsh as sawdust, and decompose more easily. For the paths between beds, I want to decrease plant growth, so I use a layer of cardboard covered with sawdust. Last summer I made sure that my whole garden was covered in mulch.

Because I start fall crops in the garden in July and August, I’ve practiced getting seeds out of the ground in hot dry weather. If I don’t need to dig the bed (often the case), I just poke each seed down through a hole in the existing mulch, or plant small seeds along a slit in it. To keep the sun from drying out the seeds quickly, I sprinkle a thin layer of very fine sawdust over the seeded areas. This prevents the sun from baking the soil dry between waterings; I only need to water the seeds once per day in the morning. After the seedlings are up and have some true leaves, I add more mulch around them and they are on their own.

Last summer I wanted to plant some field peas in mid July, when it was very dry. I dug the bed before planting to get rid of some mint and bindweed roots. As I was digging it (gently with a digging fork, to avoid turning it into powder), I noticed that below the first two inches, the soil was dark brown instead of dry gray, indicating moisture. By the time I finished digging, it was noon; time to get out of the garden. Rather than plant the peas before heading for shade, I created furrows with a hoe, and then quickly mulched between them with newspaper and bark chips. I planted

the peas the next morning, when it was (relatively) cool again. Conserving the existing soil moisture was more urgent than getting the seeds into the ground a day earlier. When I watered the seeds, the newspaper acted as a water diverter, funneling all the water I put on the bed into the seed furrows. I got almost 100% germination. After the peas were well up, I mulched around them, ending up with a weed free bed that required no extra water.

I space the plants in each bed so that as they mature to full size, the leaves of adjoining plants just touch. This creates a “living mulch” that shades the whole bed, inhibiting both weeds and water loss. The plants absorb as much of the solar energy as possible, putting it into growth instead of evaporation.

The last thing is to be patient. Like Jeff, I had crops (green beans and sweet peppers in particular) that produced for a while in the summer, and then just quit. Since they were alive and healthy, I left them alone, and was surprised when they responded to the friendlier late September/October climate by flowering and producing a good second crop.

These techniques also can be beneficial in wet weather. The organic matter and deep digging allow good drainage and good absorption, so heavy rains just disappear into the ground for later use. The mulch layer prevents heavy rain from compacting or eroding the soil surface. Digging by hand is much gentler on the soil structure, and can be done in both wetter and dryer conditions than mechanical cultivation. Not needing to dig at all can allow planting right after a heavy rain, rather than having to wait for the ground to dry out for digging. And, through weeks of cloudy, rainy weather, patience is beneficial, as the plants will sit there waiting for the sun to shine. Happy gardening through whatever Nature throws at us!

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