Microclimates make time travel easy

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If science ever gets around to it, time travel's early experiments might not seem all that exciting to generations brought up on the mass media. A day here or a week there might not phase folks brought up on Captain Kirk.

Yet, if I told you that you could do a little time traveling right now in your own back yard, wouldn't you be interested? Or would you think I was just another Santa Fe New Age nut?

The fact is that October is a great month for taking your garden back in time by using and manipulating the microclimates in your landscape. By reducing the effect of the first regional frosts of fall, your garden (or at least parts of it) can enjoy an extended summer – and in so doing have the effect of turning back the clock.

A microclimate is any place that differs from a neighboring place by being more or less hot, dry, windy, illuminated and/or nutrient rich. Here in our high altitude desert, extending our growing season usually translates into increasing the temperature of a place.

The easiest way to do this is to place a massive, preferably dark-colored, object on the north side of a plant or group of plants. The object will soak up the sun's energy during the day and release heat at night when ambient temperatures drop.

Because our first frost can come weeks before the heavier frosts that inevitably follow this one, simple act can significantly increase the beauty, productivity, and ultimately the value of a piece of property. For example, in our garden last year we were able to harvest rosemary ('Arp' variety) all winter because we had planted it on the south side of a small rock wall.

Plants that are placed along the south side of a house will benefit not only from the sun's energy, but also from heat generated from within the structure itself. Water wells, those rings of plastic tubing that stand vertically around

plants, will also work wonders. A cold-tolerant artichoke ('Globe' variety) planted in a water well on the south side of our solar home here in Santa Fe thrived last winter. Due to the warmer microclimate, the frost-sensitive plant, which was also given a layer of gravel mulch, produced over 20 delicious artichokes last spring!

Temperatures will also be effected by variations in topography. Because heat rises, valleys and even small depressions in the terrain will tend to freeze before higher elevations, especially compared to south-facing slopes with trees that trap the rising warm air.

On the other hand, due to the cold breezes that tend to increase near the tops of slopes, do not expect warm microclimates on hilltops and ridges, even on a small scale. In general this makes the area in the middle of the slope, namely, the "thermal belt," the optimum place for gardening furthest into the fall.

For those who wish to take garden time travel to the next dimension, consider installing cold frames or building a greenhouse. Cold frames are essentially greenhouses that are too small for people. Picture a low-lying box with no bottom and a glass or plastic top that you can lift up to access flowers and vegetables during the coldest days of the year.

Another great way to extend your garden's growing season is to plant cold-hardy edibles including leafy greens, root crops and cold-hardy herbs.

Unless you are using a greenhouse or cold frame, or unless you have created some unusually warm microclimate, it is probably too late in the year to expect seeds to germinate. In the flower department the blossoms of chrysanthemums and calendula have reasonable survival rates into the fall.

Here in northern New Mexico we can expect evenings to fall below freezing very soon. So, if you wish to adjust the laws of physics a little, the time to start is now.

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