

## ***“I’m wilting and I can’t get up”!! Greenhouse gardening helps plants up***

High desert gardening with limited amounts of rainfall is challenging enough without periodic droughts. How we meet the challenge of helping our plants “up” can make all the difference.

Without adequate water, oxygen, nutritious soil, and sunlight would not be enough to keep plants from wilting. Economical water use in gardens is a great start. Fortunately, a well-designed greenhouse can save water and minimize evaporation.

*Drip Irrigation systems* deliver water slowly and specifically to the area that you want to irrigate, getting to plant root systems where it will do the most good. It also aerates the soil, creates less compaction and stimulates healthier plant growth.

*Raised Beds* allow plants, vegetables, and flowers to grow in a tighter, more nutrient-condensed space. There is no wasted water filtering through areas without roots. This also keeps pathway weeds from interfering and robbing minerals in water which could be reaching intended targets. Raised beds also play a role in diffusing winds that can dry out plants quickly.

*Shade Cloth* use is a low-tech method of controlling temperatures. It comes in a variety of absorbencies and colors. The shade material temperature is an important factor in determining the net radiation on the plants. Shading can be used to save half of the required water without sacrificing yield. It acts as an evaporative cooler by drawing heat up and allowing cool air to be drawn from below, saving water and money.

These controls make it easier for plants to adapt to the outdoors on less water, especially when transplanting during dry periods.

Rod Gesten, a certified Master Gardener and owner of Mud Hub Greenhouses, recounts, “I was told of an experience somebody had sowing rare heirloom tomato seeds successfully indoors in a flat with a plastic cover. As the seedlings grew to the point of hitting the cover, they were transplanted outdoors. Every plant died. The stems were spindly. Each one drooped over and dried out.”

Gesten explains that the indoor environment gave them adequate water with limited evaporation. They did not require a lot and were able to thrive. As soon as the seedlings were exposed to the harsh outdoor environment the plants became stressed and died. According to Rod, “introduce your plants gradually to the outdoor elements so they will have a better chance of survival. Greenhouses help keep those elements that dry out plants in check and increase chances of growing success.”

For more info on growing and greenhouses, contact [rod@mudhubgreenhouses.com](mailto:rod@mudhubgreenhouses.com) or go to [www.mudhubgreenhouses.com](http://www.mudhubgreenhouses.com)