Yard and Garden Article for 05-07-2016 by Ted Griess – Horticulture Extension Assistant

Gardeners are always thirsting for knowledge, so today my column is all about watering. Forgive the pun, but I'm reasonably sure watering one's landscape is not a high priority at the moment. After all, most of central Nebraska received well over ten inches of rain through the month of April, and more is expected on the immediate horizon. It seems presently, grumbling prevails. When are things going to dry out? Will I ever be able to get into my garden and plant? Everywhere it's mud, mud, mud.

Mark Twain once said, "If you don't like the weather in New England now, just wait a few minutes." That famous quote certainly fits Nebraska's weather. One should never become contented with Nebraska's weather for it will assuredly change and often times quite suddenly. Sunshine, heat and perhaps even drought will surely arrive, and when it does, so will the need for more water.

Consider the importance of utilizing water wisely. All green plants undergo photosynthesis, the food-making process involving water, light and carbon dioxide. Water enters the plant from the soil through its roots; it is then transported throughout the entire plant including its leaves. Carbon dioxide from the atmosphere enters the leaves of a plant through tiny openings called stomata. When carbon dioxide enters the leaves, water vapor escapes. Nearly ninety-eight percent of the water absorbed by plants exits through its leaves. This "exhaling" of water vapor, called transpiration, cools the plant in hot weather very much like perspiration does for humans. As one can see, in order to maintain a green oasis, water is needed, and lots of it.

The first step in being a water-wise gardener is to plan before planting. It is important to determine the characteristics of the planting site: sun, shade, wind, soil and ease of landscape maintenance.

After carefully evaluating the site, selecting the plants to grow is next. Keep in mind, labor intensive turf grass demands high volumes of water. As a substitute to turf, consider planting groundcovers or low-maintenance perennials. Attempt to group plants with similar water needs. Plants that thrive by getting most of their water from natural rainfall are the best choice. For water-thrifty perennials, select those that are native to our area. The Nebraska Statewide Arboretum has an excellent website listing suggested plants best suited for Nebraska's hot, dry weather. <u>www.arboretum.unl.edu</u> When it's time to water, efficiency matters. Deliver the water directly to the roots through either soaker hoses or drip irrigation systems. Both systems insure up to ninety percent efficiency while minimizing evaporation loss. Sprinkler systems claim only forty to fifty percent efficiency.

Soil is an assortment of mineral particles of different sizes. If most of the particles are large, such as sand, water drains through it rapidly. If most of the particles of soil are small, such as clay, the water penetrates it more slowly. The solution for either of these problems is simply to add organic matter such as compost, chopped up leaves, or grass clippings. Any of these additives will improve the texture and water-holding capacity of soil.

Applying a three-to-four-inch layer of organic mulch around plantings is another great way of watering wisely. Mulch keeps the soil cool, conserves moisture by reducing evaporation and inhibits the growth of weeds.

For now, let's quench our thirst for water knowledge. Should it continue to rain, stop grumbling and consider collecting rain from your downspouts in rain barrels. After all, a one-thousand square foot roof will yield six hundred twenty-five gallons of free water from one inch of rain. Rest assured that saved water will come in handy for watering plants after the weather changes—and it will!