Yard and Garden - 10-3-09- Ted Griess/ Extension Horticulture Assistant

O suns and skies and clouds of June, And flowers of June together, Ye cannot rival for one hour October's bright blue weather;

When on the ground red apples lie In piles like jewels shining, And redder still on old stone walls Are leaves of woodbine twining:

Helen Hunt Jackson

Lately I, too, have been seeing red. I've received numerous reports from others that they are seeing red. It's all about early fall coloration.

October has arrived and with it returns Nebraska's great autumn weather. Short, warm, sunny days with crystal blue skies and crisp, chilly evenings aptly describe our current weather. Writer Helen Hunt Jackson (1830-1885) best describes what's happening in her poem *October's Bright Blue Weather*.

This past weekend, Rita and I drove to Lincoln to watch our grandson play midget football. On our return trip, we deliberately avoided driving Interstate 80. Rather, we chose to drive U.S Highway 6 from Lincoln to Minden. With less traffic and slower speeds, we relaxed and paid closer attention to the autumn splendor of the countryside. Tooling down the two-lane on that

Sunday afternoon, we noticed the many fields of corn and soybean clothed in assorted shades of amber and brown while some still wore the remnants of summer's green. The roadside ditches were filled with mixed colors. The remaining summer blossoms of wildflowers strutted their stuff while tufts of maroon and golden native grasses shimmered in the breeze. All of them glistened against the rays of the setting sun. As we passed thickets of scarlet-colored sumac. we reveled in their brilliant beauty. At the same time, we commented to each other how it seemed the colors of fall were arriving early.



Sumac – photo 9-29-09

All signs indicate that autumn's colors are arriving a bit earlier than usual. Generally, we see seasonal color change toward the middle or end of October rather than at the beginning. The fact is change is occurring.

I've often boasted that seasonal change is one of the reasons I enjoy living in Nebraska. I can't imagine what it would be like if I lived where one could not enjoy the beauty of seasonal change.

Dogwood - photo 9-29-09



Why trees, shrubs, and other perennial vegetation experience color change in the autumn is an interesting phenomenon. During the growing season, all green vegetation is actively undergoing photosynthesis due to a green pigment called chlorophyll. As summer ends, the days become shorter and colder. Shorter days equal less light for plants to continue photosynthesis; thus, they begin to go dormant. As plants shut down, the chlorophyll dissipates while other hidden pigments of

oranges and yellows emerge. The bright red color we are now seeing in sumac, as well as in other red-colored plants, is caused by trapped sugars in the leaves changing to a visible crimson pigment called anthocyanin. The brown color we often see is made from the organic waste remaining in the leaves, a substance called tannin.

| Woodbine - photo 9-29-09

Sunlight and cool evening temperatures highly influence color change. The brightest colors are achieved when autumn days are sunny and dry with evening temperatures remaining in the lower 40's. These combinations create the colors we enjoy in autumn. Sadly, a heavy killing frost will quickly end this colorful display.

We have a hybrid cultivar red maple tree in our backyard called *October Glory*. What an appropriately descriptive name — when things go



right. We planted it nearly fifteen years ago, and only during a few of those fifteen years have we been able to enjoy its true glory — a flaming scarlet red.

Notice, earlier I wrote that a heavy killing frost ends the color change of autumn. Many trees, shrubs and other plants can survive light frost yet continue to display their colors. My only hope now is that October's days remain sunny and bright with crystal blue skies, and its nights remain cool. If this happens, *October Glory* will truly shine, and I'll continue to see red.