Why Are Some Flowers Still in Bloom?

by Marilyn Loser

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What a season! There's snow on the mountains and we experienced our first freeze Tuesday morning. The storm systems that devastated parts of the Front Range brought welcome rain and some drought relief to Alamosa gardeners.

At the end of May we'd had only 1.06 inches of rainfall for the entire year. As of fall equinox we've had a total of 7.86 inches of rain. According to the Wunderground website, our average yearly precipitation is 7.31 inches and last year we totaled only 5.58 inches.

I returned from a trip last week expecting all but the hardiest flowers to be gone. Instead, I was greeted by purple petunias cascading out of the whiskey barrel along the drive and lavender cosmos waving in the breeze from many spots in the garden. Shirley poppies, California poppies, late Shasta daisies, snapdragons, fall asters, and chrysanthemums were still going strong.

A number of factors determine when and if a plant will bloom. External factors such as daylight length and environmental warmth and moisture are critical. Individual plants need to accumulate enough energy to produce flowers. In recent years, scientists have discovered specific genetic processes that trigger plant behaviors.

Living in the San Luis Valley, flower gardeners know that annual petunias are not as cold hardy as many poppies, but are prolific bloomers. All flowering plants have a number of non-specialized cells according to the Flanders Institute for Biotechnology (FIB). "Annual crops consume all the non-specialized cells in developing their flowers," reports the FIB. "The life strategy of many annuals consists of rapid growth following germination and rapid transition to flower and seed formation." They don't need to save energy for surviving the winter.

The petunias I buy at local nurseries are different than those my mom bought in the 1950's. According to the Proven Winners website, "As time has gone on plant breeders have put a lot of effort into choosing plants that will continue to bloom without deadheading [ML note: deadheading in this case refers to removing spent blooms and any developing seeds from plants rather than attending a Grateful Dead concert in days gone by]. Sometimes this is because the flowers are sterile and sometimes it is simply because it is possible to choose plants who are prolific bloomers despite setting seed."

On the other hand, I think Shirley poppies are an old fashion flower that hasn't changed much since Celia Thaxter published "An Island Garden" in 1894. She would sow poppy seeds every few weeks as individual plants would spring up, produce blooms for a relatively short period of time, and die. Her frequent sowing provided a summertime of poppy blooms.

While I try to follow Thaxter's advice, I don't seem to get around to strewing seeds periodically during the summer. Of course the dying poppies drop their tiny seeds, many of which blow around the garden. Thanks to Mother Nature, I have poppies blooming in new places in the garden that don't get direct water from my low pressure watering system.

My nursery-grown snapdragons have made a dramatic comeback this month. They bloomed heavily in June and July. I cut them back and due to the length of the season and wonderful moisture they had time to rebloom. Deadheading is an attempt to trick a plant into thinking it hasn't bloomed thus causing it to use its energy to set new blooms – many perennials have the ability to assign non-specified cells to blooms or structures for overwintering as needed. This works for me with snapdragons and penstemons. I only deadheaded a few penstemons during the summer, and sure enough, the untrimmed plants did not rebloom this year.

Fall asters and chrysanthemums are known to bloom late in the season. A late blooming surprise has been a beautiful fringed Shasta daisy (*Leucanthemum x superbum "Ice Star"*) I planted last summer. The tag on the plant said it would bloom from late spring to midsummer, but both specimens burst out in late August.

A future column will outline some of the recent science pertaining to flower bloom time. In the meanwhile, I hope you have a few flowers left for a fall bouquet. Visit AlamosaFlowers.net for more information on flower gardening in the San Luis Valley.

"I am fully and intensely aware that plants are conscious of love and respond to it as they do to nothing else. You may give them all they need of food and drink and make the conditions of their existence as favorable as possible, and they may grow and bloom, but there is a certain ineffable something that will be missing if you do not love them, a delicate glory too spiritual to be caught and put into words." Celia Thaxter, "An Island Garden"