Extra rain likely to nurture spectacular wildflowers

By Mark Wheeler / Hi-Desert Star *Tuesday, December 28, 2004 11:26 PM PST*

MORONGO BASIN - With the arrival of any new year, there is always much to look forward to, and one thing residents of the Hi-Desert might count upon for 2005 is a record wildflower spring.

This could very well be one of those blooms people talk about for years, the mythical "hundred-year bloom." What this label means is the bloom reaches proportions which, when rated against all other blooms in, say, a millennium, appears only about once every 100 years.

Another way of understanding it is that in any given year, such a bloom has a 1 percent chance of occurring.

Why we might expect such a flowerful fortune this new year is based on the appearance this fall and winter of textbook conditions necessary for producing spectacular blooms. Chiefly, there has been rain. However, the timing and amount of the rain we received is the critical factor.

Spring wildflowers, or "winter annuals" as they are more botanically called, need two to three months to germinate from seed and to form the original rosette of ground-hugging leaves. What sets the whole process in motion is about an inch of rain received at the beginning of the period. What keeps the plant from flowering prematurely is the colder soil temperatures of winter - below about 68 degrees Fahrenheit.

For the most part, authorities name October as the critical month for watering the seeds. During the past October, Yucca Valley and nearby environs received about 3 inches of rain for the month, well in excess of the 1 inch required for germination, and far more than the .06 inch average shown in county fire department records dating back over 30 years.

The water leaches growth inhibitors off the shell of the ground and, simply put, this allows the germ to break through it. Slowly the young plant develops through the next two-plus months, putting up its early seed leaves very close to the ground where the underside remains protected from potentially frigid air temperatures. During this phase, additional watering nurtures the developing plants and helps

assure survival for as many of them as possible.

As temperatures increase during the early new year, the young plants start to grow. Sunlight and warmth, of course, guide this process. Typically, by the time ambient temperatures have warmed enough to coax pollinators out of winter torpor or have brought them back from winter travels, the plants have matured enough to support flowering, and the show begins.

We have had more than an inch of rain every month since October, including about 1.4 inches of it received in November in the form of snow. The colder temperatures which prevailed during and for many days after the snow permitted most of the water content to percolate into the soil where it would do the most good, instead of running off and evaporating into the air.

Fortunately, most annuals can tolerate moderately freezing temperatures quite well, and in the bargain, many botanists believe freezing temperatures play an important role in the flowering of yuccas. Hence, not only may we see the annuals and flowerng shrubs in spectacular display this spring, but the spiny Mojave emblems themselves might be breaking forth also in frothy flower as well.

Barring the occasion of either an unseasonably early hot and dry spell, or an unseasonably late freeze, we should be right on track for the kind of spectacle worthy of record books.

Those who have ever seen the desert bloom at its best will know what to look forward to this spring of 2005. Those who have never seen it, have quite a surprise ahead.

Anyone interested in learning more about what makes the desert bloom, among many good books are: "Desert Ecology," by Sowell; "Introduction to California Plant Life," by Ornduff, et al.; "A Natural History of California," by Schoenherr.