

The Weekly Plant 6 January 2016

On a recent hike I was surprised to find many folks asking when spring wildflower season would begin. The study of when plants bloom (or when animals do certain things) is called phenology. This of course generates a month-by-month list of when flowers most likely appear, but it does more. Phenology looks for the impact of weather on flowering (new leaves on your ocotillo? It rained two days ago.) and for correlations between plant flowering and pest activity. For example, back in the Midwest, the seeds of weedy crabgrass will begin to germinate in spring soon after the redbuds start to bloom, no matter if winter was cold and dry, warm and wet, no matter if the redbuds bloom





on March 25 or April 25. The redbud is responding to environmental cues such as soil and air temperature, the same cues that signal crabgrass germination. Thus we can use the redbud with its noticeable flowers as a timekeeper for the crabgrass seeds that we can't see.

I have been informally keeping track of when plant blooms by dating all my photos. My observations:

* the two most common winter-blooming plants are brittlebush (*Encelia farinosa*, look along Loma Alta) and chuparosa (*Justicia californica*, on Villa grounds). Some Daleas (see examples on Villa grounds) may also flower in winter.

* there are a number of non-natives that bloom in our winters: South African

aloes and Australian acacias and invasives like Sahara mustard and London rocket (I've seen both of these flowering already this winter).

* If winter is mild, some of our longblooming wildflowers just keep on producing a few flowers. This includes fleabane (Erigeron species), globe mallow (Sphaeralcea ambigua), desert marigold (Baileya multiradiata), paper flower (Psilostrophe cooperi), verbena (Glandularia gooddingii), and fetid marigold (Thymophylla pentachaeta).

* Spring wildflower season is highly dependent on the weather. However, the

earliest flowers - scorpionweed (*Phacelia* species), fiddlenecks (*Amsinckia* species), popcorn flowers (*Cryptantha* species), fairy duster (*Calliandra eriophylla*), Arizona jewel flower (*Streptanthus carinatus*), and California poppy (*Eschscholzia californica*) - are frequently in bloom by late February. Lupine and many other wildflowers bloom in March, with trees putting on a show somewhat later.

If you'd like to learn the expected bloom time for more plants, check out the Arizona-Sonora Desert Museum <u>Phenology page</u>. If you're headed to the UA campus, check out the Arboretum's <u>What's in Bloom page</u>. You'll discover all sorts of exotic plants to enjoy on your next visit.

All photos taken at Academy Village on January 6, 2016 unless otherwise indicated. Left, from top: globe mallow, brittlebush, fleabane

Right, from top: creosote, a shrub that can flower any time of the year if rain is sufficient; London rocket, a non-native with invasive tendencies; Sahara mustard, a very aggressive invasive plant. Photo taken across Old Spanish Trail from the Village. Within Academy Village, the Open Space and Trails Committee works to eliminate this plant.





Photos and text by Mary Welch-Keesey