REPORT FROM THE FIELD

CURRENT STATUS 13-14 MARCH '21

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Again, Mother Nature demonstrated she doesn't wait long for anyone; especially Old Man Rain. She just makes do with what she has been given.

On 13 March, we observed our first open poppy blossoms (Figure 1) of the 2021 spring wildflower season. There weren't many, we counted them on our fingers, plus a few more plants with harder-to-find developing buds. Over the two days, many of the trails on both the west and east side of the Reserve were walked. All of the observed blossoms were along the North Loop of the Antelope Trail on the east side of the Poppy Reserve.



FIGURE 1: FIRST POPPY BLOSSOMS OF THE 2021 SPRING WILDFLOWER SEASON TAKEN 13 MARCH '21

With the extremely limited number of poppy plants growing this spring, don't expect to see large swaths of generalized color this season. It will be more like a treasure hunt where you keep track of how many poppy blossoms you find during your visit to the Poppy Reserve.

Even if it is unlikely for visitors to find open poppy blossoms along the Reserve's western trails right now, they can still be well rewarded by the perennial bush lupine currently blooming near the western end of the Tehachapi Vista Trail, Figure 2. There is a similar, but smaller, cluster of bush

lupine plants near the beginning of the Lightning Bolt trail that might also be blooming; keep your eyes peeled for beautiful blossoms.



FIGURE 2: PERENNIAL BUSH LUPINE
TAKEN 14 MARCH '21

More surprising and more unusual, even fewer filaree blossoms were observed and a large percentage of the filaree plants appeared to be extremely stressed. It is not clear yet if the latest rain storm that deposited only 1/8 inch of rainfall three days ago or the storm forecast for tomorrow arrived in time to revive the dying filaree plants. Only time will tell.

Probably the most prevalent open blossoms are found on the fiddleneck plants but that is still not saying much because these plants are also very sparse and scattered. Don't expect to find the more typically seen tall plants with full, curved fiddlenecks made up of a multitude of tiny yellow blossoms. At least so far this spring, the fiddleneck plants are dwarf, only a few inches tall, with only a single tiny yellow blossom or, at most, a small cluster of yellow blossoms, Figure 3. The

fiddlenecks seem to be an example of extreme adaption to severe drought conditions. With their seeds germinated, the plants adapt as a means to survive long enough to partially replenish the soil's seed bank.



FIGURE 3: FIDDLENECKS BLOSSOM
TAKEN 13 MARCH '21

In preferred goldfield areas, it was easy to find goldfield plants with buds so these golden blossoms should be open soon but, again, due to the plants' sparse density, it seems unlikely that visitors to the Reserve will be rewarded with the large swaths of golden yellow seen in many years.

During the previous visit to the Reserve several weeks earlier in late February, a desert parley plant was already blooming. Several additional desert parsley plants were located in the same area during this visit; one blooming and one not yet. The plant not blooming had been located during the previous visit and it leaves had been severely harvested by some rodent. That plant had clearly survived and now looked very healthy; just no blossoms.

Four plant species that were notably missing were the slender keel fruit, the forget-me-nots, red maids and pygmy-leaved lupine. The slender keel fruit is typically one of the spring season's first blooming species and one of the most dependably seen but, it appears, not this year. With a couple of possible exceptions, no slender keel fruit plants, or blossoms, were observed during the two days

of Reserve visits. Two small plants were observed with still closed blossoms, Figure 4. The closed blossoms appeared to be yellow so these might still be slender keel fruit plants and the plants are just late blooming. Two sizes of forget-me-nots blossoms are typically seen on the Reserve, one very tiny and a second larger, but still tiny, blossom, but both are conspicuously missing this spring. Red maids are another early spring season blooming species that is seen during many years but not all and are missing again so far this spring. Young pygmy-leaved lupine plants had been observed during earlier Reserve visits but none during this latest visit. Were they just missed or had they not survived the dry conditions is an open question.



FIGURE 4: POSSIBLE SLENDER KEEL FRUIT BLOSSOMS
TAKEN 13 MARCH '21

A common theme for all of the plant species discussed above is that there appear far fewer plants of each species this spring than in most years and far fewer than seems to be needed for outstanding color displays. The Blue dicks species is an exception to this observation. Large numbers of blue dicks plants' monocots were observed; maybe even more than in many years. A large percentage of the plants' monocots were shorter and smaller diameter than normal and a significant number of them appeared to be unhealthy, starting to wilt, but the numbers were there.

Recalling that the amount of seed germination is determined by the strength of the individual rainstorms but, once seed germination occurs, the young plant survival and quality of the spring wildflower displays are then dependent on the timing of the subsequent rainstorms and total seasonal rainfall. If the poppies are representative of the other plant species, the plants currently growing on the Reserve germinated from the late December 2020 rainstorm. That storm deposited only ½ inch of rainfall at the Reserve and that rainfall amount is the lower limit where any seed germination has been observed. This accounts for the small number of plants observed. Even though the late January 2021 rainstorm deposited 1 inch of rainfall at the Reserve, no additional

poppy seed germination was observed following that storm. It appears this might also be true for the other plant species as well. An alternative possibility is that the seeds for the other species did germinate from the January rainstorm but there was subsequent high mortality of those young plants because the next rainstorm did not come soon enough. The data is lacking to determine which, if either, of these alternate possibilities might explain the small numbers of plants growing this spring.

There is a short list of plant species that have only one, or two or three, known plants growing on the Reserve. The linear-leaf goldenbush, 3 plants, and the apricot mallow, only 1 plant, are two. During the visit, the apricot mallow plant and one goldenbush plant near the Visitor Center were checked. Both of these smallish perennial bushes did not look healthy. Figure 5 shows the apricot mallow leaves. Part of both of these plants died during the 2012/2013 and 2013/2014 drought seasons and the plants never fully recovered. It would be sad if this drought year is the final death knell for these plants. Because these plants have been known of for 15 to 20 years, it is also possible the plants are simply drawing near the end of their natural life span. In any case, if these plants don't survive this dry year, it will be a big loss.



FIGURE 5: APRICOT MALLOW PLANT TAKEN 13 MARCH '21

The specific objective of the previous visit to the Reserve was to document the poppy seed germination that resulted from the late January rainstorm. Unexpectedly, no poppy seed germination was observed. In one of the wettest areas on the Reserve, one young poppy plant was observed that, most likely, came from that January rainstorm, Figure 6. This small plant still had healthy looking cotyledons but the plant's first true leaves were also developing.



FIGURE 6: YOUNG POPPY PLANT WITH COTYLEDONS AND FIRST TRUE LEAVES
TAKEN 13 MARCH '21

This visit's "magical moment" came when we crossed paths with a young gopher snake sunning itself just off the east ridge trail, Figure 7. Even though it quickly bolted when it was almost stepped on, it then stayed still for quite some time sampling the air before it started to very slowly slither away with a rhythmic movement of its head. The snake found a burrow and started to move into the burrow before it found the burrow was too short and had to back out before continuing on its way with the same slow rhythmic motion. Marsha videoed this snake so maybe she will post the video on the PR/MDIA website for all to enjoy. A word of warning; if the gopher snakes are out, it seems likely that the Mojave rattlesnakes are also out and active.



FIGURE 7: GOPHER SNAKE TAKEN 13 MARCH '21

rewarding to visit the Poppy Reserve and simply walk the many trails.					

Even if it is unlikely that this spring will bring outstanding wildflower displays, it is always