

# Borrego Desert 2018-19 "Season"

## Bloom Analysis and Prediction as of March 1, 2019

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**Bottom line, the second big wave of flowers has begun while some first wave blooms still linger. Many lower elevation washes, canyons, and hillsides are bursting with golden patches of poppies.**

### The 2018-19 Borrego Desert Season will have 2 overlapping BIG WAVES of FLOWERS

**The first big wave of flowers has peaked and is winding down, but some blooms still linger.**

#### What triggered the first wave of flowers?

We had *significant* rain in *spotty areas* of the Borrego Desert with the October 12, 2018 storm. It was still hot in the desert, but it was cooling off from the peak summer heat. It appears that the temperature was still warm enough to trigger the germination of some monsoonal annuals (seeds triggered by summer storms), and just cooled-down-enough to trigger the germination of some "spring" annuals (calendar winter, but what we in the desert call spring). Along with the annual flowers, the shrubs and subshrubs have responded with new leaves and their own beautiful blooms.

**So now on March 1, 2019, the more widespread second wave of flowers has begun.**

#### **For FLOWER EXPERIENCES:**

So many spots are lovely now! For up-to-date photos and locations, check the current blog at [BorregoBlooms.org](http://BorregoBlooms.org).

#### What has triggered the second wave of flowers (our more typically-timed Spring Bloom)?

The Borrego Valley desert floor received 0.39 inch of rain in a November 29-30, 2018 storm. This is not enough rain to trigger widespread germination, BUT it is enough rain to soften the dry surface of the soil and to make the soil receptive to additional rain without run off. And, so what do you want after such a preparatory rain? A storm of *at least 1 inch* in order to trigger the germination of annual seeds. And, the desert got it! A storm event on December 5-7, 2018 brought 1.06 inches of rain.

- Think of the desert in the Spring like you would think about planting and watering a garden.
- After you have the seeds in, all experts advise, "Give your garden a good soaking." That is what the December 5-7, 2018 storm did that delivered 1.06 inches.
- Then, what do the garden experts say? "Water at regular intervals." And, voila! The desert has received just such a watering regime. *The well-timed interval rains that are nurturing the December germination have also allowed the October-germinated plants to grow bigger, have more flowers, and last longer.*
- Rain to date:
  - **A germination-triggering monsoonal downpour on October 12, 2018 in spotty areas.**
  - A soil-preparing rain on November 29-30, 2018 of 0.39 inch.
  - **A germination-triggering rain on December 5-7, 2018 of 1.06 inches.**
  - An interval watering on December 31, 2018 of 0.52 inch.
  - An interval watering on January 6, 2019 of 0.11 inch.

- An interval watering on January 12, 2019 of 0.14 inch.
- An interval watering on January 14-17, 2019 of 0.71 inch.
- An interval watering on January 31-Feb2, 2019 of 0.74 inch.
- **A germination-triggering rain on February 13-18, 2019 of 2.98 inches.**
- An interval watering on February 20-21, 2019 of 0.50 inch.

**So, does this guarantee us a special Bursting-with-Blooms Spring this year? Yes!**

Pretty much nothing can derail the bloom now. The heavy rains in February have given the plants enough stored moisture in the soil to withstand a heat wave without withering, and frost danger has passed. So, even if the winds and the caterpillars have started to work their annual mischief,

**It's a Bursting-with-Blooms Spring!**