

Haley Gale & Emily Wu

APES (Block G)

### Global Forest Link: Mission Trails



Our photos show the state of the forest in Mission Trails which is West of Tierrasanta and North of San Carlos, and near state route 52. The park itself is composed of a series of canyons and hills, generally covered by dry shrubbery and trees. The forest itself is classified as a coniferous forest because it has a lot of small coniferous trees. It also looks like a shrub landscape because of the abundances of short and tall bushes, in addition to cacti. Due to the large amounts of dry grass and shrubs, combine with the drought conditions and Santa Anas that San Diego is prone to, we hypothesize that Mission Trails is extremely susceptible to wildfires. Our photos show that the area is generally quite dry, and is therefore prone to wildfires. In this particular area of Mission Trails there was no evidence of extensive damage from wildfires, although some small areas indicated that wildfires had occurred there before. In one area of the trail, we noticed a bridge over a dried up river bed. This is possibly indicative of drought conditions, however when the area receives more rainfall a small river / stream

develops beneath the bridge. While walking along the trail, we noticed “sensitive habitat area” signs telling visitors to stay on the trail. This helps to minimize the amount of human activity that could disrupt or destroy animal habitats and ecosystems.

The presence of greener bushes and trees correlates with the improving drought conditions in California as well as the seasonal transition from summer to fall, which is decreasing temperatures and allowing more flora to grow. Global Forest Watch indicates that there are quite a few areas of Mission trails in which there has been tree cover loss. However, in some areas near the San Diego River, there has been small amounts of tree cover gain. As for weather, annual average temperature since 2008 is 62.9°F and the average for 2017 is currently at 63.2°F, which is 0.3°F higher than the average. With rainfall, the annual rainfall average since 2008 is 12.54 inches, but the average for 2017 so far has been 19.05 inches, which is currently 6.51 inches higher than the average.

The brush fires that occurred July of 2014 and in May of 2017 both showed the abundance of dry shrubbery makes hazardous conditions for fires. According to NBC News’ interview of a resident near Mission Trails, the shifting Santa Ana winds that go through San Diego make the area especially prone to wildfires. Although some of the places that the fires affected were closed to the public directly after the fires, mission trails has largely recovered and its plant life is beginning to thrive again.

#### Works Cited

Adams, Andie. “Fire in Mission Trails Park Fully Contained.” *NBC 7 San Diego*, NBC 7 San Diego, 16 July 2014, [www.nbcsandiego.com/news/local/Brush-Fire-Burns-in-Mission-Trails-Park-266943561.html](http://www.nbcsandiego.com/news/local/Brush-Fire-Burns-in-Mission-Trails-Park-266943561.html).

Hernandez, David. "Brush fire burns 10 acres in Mission Trails." *Sandiegouniontribune.com*, 22 May 2017,  
[www.sandiegouniontribune.com/news/public-safety/sd-me-santee-fire-20170522-htmstory.html](http://www.sandiegouniontribune.com/news/public-safety/sd-me-santee-fire-20170522-htmstory.html).

Institute, World Resources. "Global Forest Watch." *Oops, Your Browser Isn't Supported.*,  
[www.globalforestwatch.org/map/3/15.00/27.00/ALL/grayscale/loss,forestgain?tab=analysis-tab&begin=2001-01-01&end=2017-01-01&threshold=30&dont\\_analyze=true](http://www.globalforestwatch.org/map/3/15.00/27.00/ALL/grayscale/loss,forestgain?tab=analysis-tab&begin=2001-01-01&end=2017-01-01&threshold=30&dont_analyze=true).

"San Diego Weather at Mission Trails, CA." *San Diego Weather at Mission Trails, CA - Annual Departure from Average*, [www.wx4mt.com/wxraintemp trends.php](http://www.wx4mt.com/wxraintemp trends.php).