

Capulin Volcano National Monument's IDA Report 2018

General: Current Information for the Site's IDA Contacts

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VISITATION:

Estimated number of site visitation this past year is 52,838 visitors, of that 242 participated in dark-skies programming.

Lighting:

All park lighting is compliant with the LMP.

Funding:

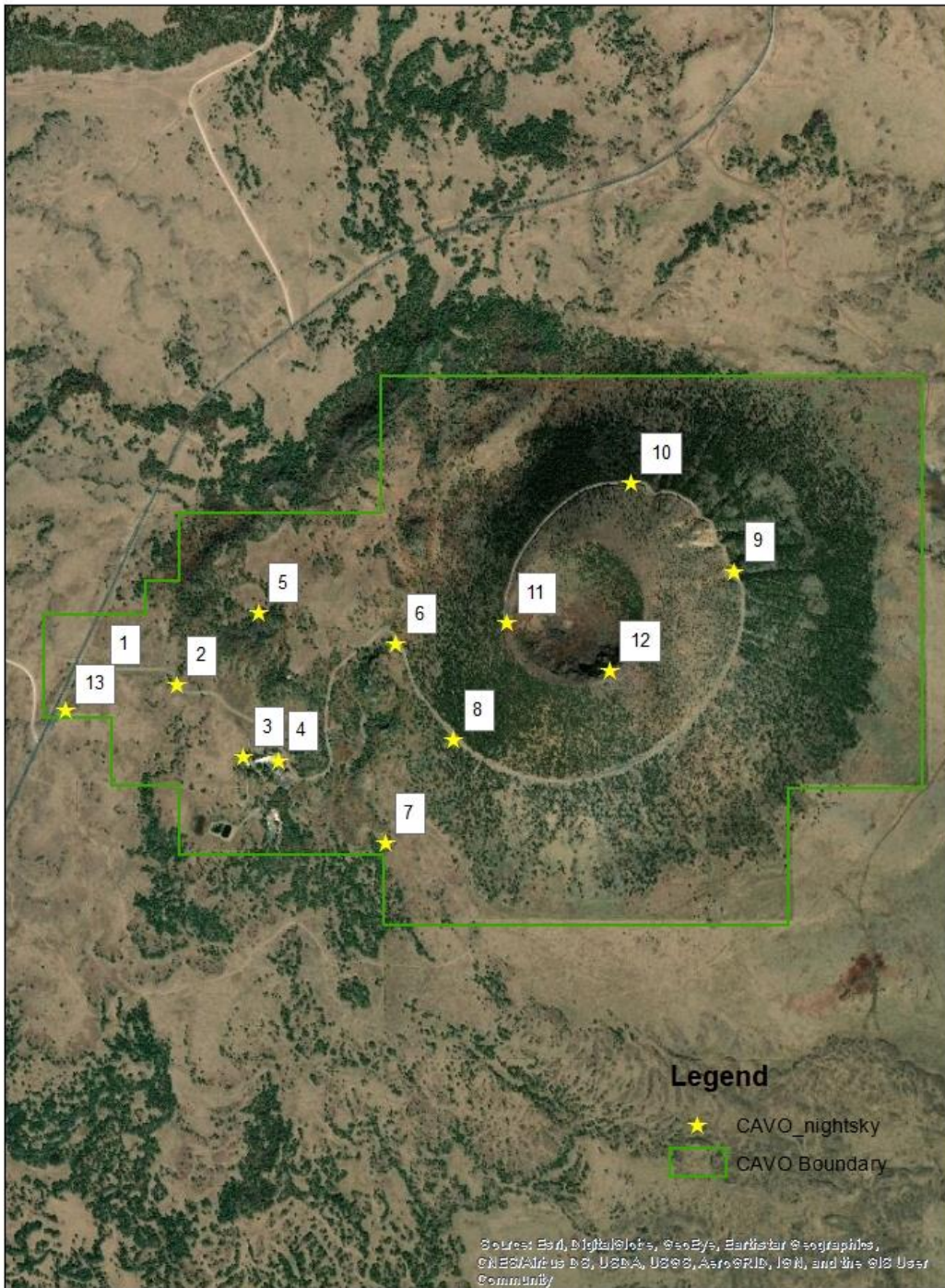
Capulin Volcano received funds from WNPA (Western National Parks Association) to help buy equipment to for night sky events. With these funds staff was able to purchase two Celestron Nexstar 8SE telescopes and multiple red LEDs that will be used to help visitors navigate in the dark.

Sky Quality:

Capulin Volcano has purchased a permanent sky monitoring mount, there are plans to have it up before the end of 2018.

The graphs below show that sky brightness is consistent with 2016. The data collected for 2016 and 2018 were both done during summer months, the numbers that were collected in 2017 were collected in the winter resulting in much higher readings.

The map shows where the data was taken within the park using the Sky Quality Meter.



Below are the sky quality meter measurements from 2016 (figure 1), 2017 (figure 2), 2018 (figure 3) using the above mapped coordinates:

Fig. 1

<i>Observation Points (2017-2018)</i>	<i>Sky Quality Meter</i>
1	21.94
2	21.95
3	21.95
4	21.93
5	21.89
6	21.88
7	21.95
8	21.90
9	21.89
10	21.94
11	22.01
12	21.98
13	N/A

Fig. 2

<i>Observation Points (2017-2018)</i>	<i>Sky Quality Meter</i>
1	24.15
2	23.86
3	24.12
4	23.65
5	24.39

6	23.88
7	23.97
8	23.62
9	23.79
10	23.77
11	23.84
12	23.99
13	23.67

Fig. 3

Observation Points (2018-2019)	Sky Quality Meter
1	21.74
2	21.73
3	22.07
4	21.98
5	21.72
6	21.92
7	21.82
8	21.91
9	21.72
10	21.80
11	21.81
12	21.76
13	21.68

Arts & Culture:

The Capulin Volcano interpretive dark skies program includes dialogue that interprets the night skies of New Mexico as a cultural treasure worth protecting. These programs seek to foster an appreciation for protecting and conserving the night sky. There is current research being done to

explore the connection of Capulin's night sky with the 17 Native American tribes affiliated with the monument.

Outreach:

There were six interpretive dark-sky programs scheduled for summer 2018. The program dates were: April 22, July 7, and July 27, August 12, September 22, and September 27.

Half of these events were hosted in the Capulin Volcano oversize vehicle parking lot, and the other half were hosted in the dark sky viewing area. The night sky events began at 9:00 pm (MST) and ended by 11:00 p.m. (MST). During, Capulin Volcano staff gave interpretive talks about the night sky and astronomical events. Equipment used was a 14 inch Dobsonian Reflector Telescope, an 8 inch Sirius Reflector Telescope, and two night sky viewing binoculars. Each event scheduled was advertised through social media, flyers, and local radio interviews. The park plans to host these events April through September in 2019, and partnering with organizations for these future events.

Visitation for each event: April 22 - 16 visitors, July 7 - 40 visitors, July 27 - 0 visitors (this event was cancelled due to poor weather conditions), August - 60 visitors, September 22 - 103, September 27 - 23.

Community & Media Relations:

Capulin Volcano developed partnerships with several organizations to deliver night sky programs that remind the public; "the dark sky is a resource worth protecting". The park partnered with the Mandala Center, (Des Moines, NM) and New Mexico State Parks to deliver night sky programs. Staff also partnered with Bandelier National Monument on night sky trainings.

Capulin Volcano also sent a staff member to the Night Sky Academy in the Black Canyon of the Gunnison, where WASO contracted the McDonald Observatory to provide training to NPS units.