

Black Canyon of the Gunnison National Park

International Dark Sky Park Report, Submitted September 29, 2018

General and Outreach Statistics:

- Contact name: Nick Myers, nickolos_myers@nps.gov or 970-249-1914 Ext: 441
- Total site visits: Nearly 307,143 in 2017, up from 238,018 in 2016. This is a 29% increase in overall visitation. Many NPS sites are experiencing rapid growth in visitation and 2018 is expected to show another significant rise in visitation at Black Canyon – with projections of nearly 400,000 visitors this calendar year.
- Black Canyon presented a total of 62 night sky programs in FY 2018 in the park with attendance at those programs reaching 3,459 visitors, up 13% from 2017 programs. The park also offered solar viewing programs on 43 days that reached 4,700 visitors. Programs were presented by astronomy ranger interpreters, and astronomy VIPs (volunteer in parks).
- The Black Canyon Astronomical Society (BCAS) contributed 328 hours to astronomy and solar programs in the park. They did outreach in the park on 20 occasions. This group of dedicated volunteers make the Astronomy program possible at Black Canyon and we are grateful for their continued support and expertise.
- The park added a fifth astronomy volunteer position this year to help with increased visitation in September. The five astronomy volunteers tallied 512 hours in support of astronomy evening programs and solar viewing. Two of our volunteers presented special illustrated programs at BCAS public meetings.
- The park had three seasonal and one permanent interpretive staff dedicated in part to astronomy. They presented 62 evening interpretive astronomy programs, 5 solar viewing days, two full moon open house programs, and three illustrated programs at BCAS public meetings.
- The park conducted the 9th annual astronomy festival on June 13-16, hosting numerous guest speakers. For the first time ever, the park held one night of the festival outside of the park in the gateway community of Montrose which was a great success. Nature writer Craig Childs and his sons presented a captivating program on our connection with the night sky in the Montrose Pavilion. After the talk, over 250 visitors moved to the nearby Montrose Botanic Gardens for night sky viewing. The park attempted another program outside of the park during the festival at Crawford State Park near the park's North Rim. Heavy rain forced the cancellation of that program. The other 2 nights took place in our usual venue on the South Rim of the canyon. Along with our amazing special guests - astronomy rangers, BCAS and astronomy volunteers did solar observation, constellation tours and evening programs. All told the evening programs for the 3 nights without rain reached 460 visitors. The 10th annual festival is planned for the first week of June 2019.

Lighting:

- No light fixtures were added or removed from the park inventory in 2018, and there were no changes to bulbs this year.
- 2,494 acres of land officially became part of the park in 2018 – these were lands already within the statutory boundary of the park as private land inholdings. At this time, no facilities are planned on this property and no current facilities or lighting exist. This area is outside of any previously approved lighting zones outlined in the park lighting plan. The addition of this acreage helps protect the viewshed to the South and West of the South Rim of the canyon.
- The park is in the process of adding more red lights to the North Rim Ranger Station and North Rim Housing.

- While the City of Montrose, Colorado has shown great interest in supporting dark sky preservation through media and official proclamations, the park is unaware of any major shift in city lighting policy or ordinances.

Sky Quality:

- Sky quality data was collected 26 times in 2018 at various locations along the South Rim of the canyon. On 11 occasions at the park's primary night sky viewing location, the average SQM was 21.24, with a high reading of 21.7 and a low of 21.2. It was noted the several SQM readings were impacted by the prevalent smoke from western wildfires during the summer of 2018. SQM data is planned to be collected on the North Rim of the canyon in October and November of 2018.

Conservation/Research:

- Currently there is no research being conducted in the park that specifically relates to night skies.

Funding:

- The park continues to fund 2-3 seasonal positions that have an astronomy focus. We recruit rangers that have an excellent science background and skills to interpret that science to visitors.
- The park funds a housing stipend for five astronomy volunteers to live in park housing during their time volunteering from late May through September.
- Funding for travel expenses and appearance fees for special guest speakers for the Astronomy Festival in 2015, 2016, 2017 and 2018 was obtained through Aid to Parks requests through our partner, Western National Parks Association (WNPA). The park plans to use this for 2019 funding needs.

Planned Programs:

2019 promises to be another exciting year of astronomy at Black Canyon. In addition to our weekly astronomy program offerings on Wednesday, Friday and Sunday nights from May – September, the park will offer one winter night sky viewing event and an event to view the January 2019 lunar eclipse. The highlight of the year will be celebrating the 10th annual astronomy festival on June 5-8, 2019 with special guest speakers and activities. All with the support and help from BCAS, TAAS, WNPA, park astronomy volunteers and seasonal and permanent astronomy rangers.

Community and Media Relations:

- Numerous articles relating to Black Canyon dark skies were published in the local newspaper, the Montrose Daily Press and the regional Montrose Visitor Guide, published by the city office of business and tourism.
- Park astronomy continues to be a popular topic and the park is often approached by local and national media to discuss night sky preservation at National Park Service sites. It is anticipated that with the popularity and news coverage on dark sky preservation and various space exploration programs, interest in all aspects of NPS astronomy will continue to grow.
- The park continues to work with the Black Canyon Astronomical Society and local radio station KVNF, on a regional radio feature called *Western Slope Skies*. Park staff members have written and recorded 11 radio spots on various astronomy and night sky related topics in 2018 and early 2019. This is an amazing interpretive writing opportunity for our staff and we are thankful to BCAS for the opportunity to contribute. All features can be found at: <http://kvnf.org/programs/western-slope-skies>

Black Canyon of the Gunnison National Park is honored to be among the designated International Dark Sky Parks. With the continued support of park staff, partners, community members and volunteers, we very much look forward to another exciting year of astronomy in 2019.