



Dark Skies at Black Canyon



People in all places, at all times have had a relationship to the night sky. As natural light gives way to artificial light, it is easy for our connection to the sky to fade with the disappearing stars. Places like Black Canyon help reclaim our natural and cultural ties to the night sky.

Officially Dark

In 2015, the International Dark-Sky Association (IDA) recognized Black Canyon as an International Dark Sky Park. IDA was established in 1988 to protect the night sky through education about astronomy, light pollution and its impacts, and appropriate lighting. Locations that seek to protect the night sky may apply to IDA to become recognized as Dark Sky Places. These locations must have dark skies, night sky education programs, night sky friendly lighting, and community support. As of 2019, IDA has certified over 120 such sites worldwide. About 30 of those locations are National Park Service Sites.



How Dark is Dark?

Dark Sky Places typically use sky quality meters (SQMs) to measure the darkness of their sky. Readings are usually taken at zenith (the point in the sky directly overhead) and at four other slightly lower points in the sky. SQMs read sky brightness in magnitude per square arcsecond. The lower the number, the brighter the sky. The higher the number, the darker the sky. The highest possible rating is 23. As of 2019, parks must have an average reading of 21.2 or higher to be eligible for consideration as IDA-Certified Dark Sky Parks.

Black Canyon readings have historically averaged 21.5. This average is similar to historic readings at Arches National Park. Readings approach 22 at park sites such as Great Basin, Big Bend, and Natural Bridges. In contrast, big cities such as Denver, Colorado have readings around 18.



Darkness at Black Canyon

Darkness falls, along with quiet and stillness. Yet, the park is still very much alive! Bats and owls swoop about the inky sky. Mountain lions, bobcats, coyotes, and ringtails are active. For them, the park is best at night. Discover for yourself the wonder of Black Canyon night skies.

The park does not close. You have night-long access for viewing. Overlooks far from the road are shielded from passing headlights for using a personal telescope, or for astrophotography. Some locations that are great for star gazing include Chasm View and Sunset View (South Rim). North Rim spots include the Chasm View Nature Trail or Kneeling Camel View. Sites in the canyon, such as East Portal, are very dark, but the amount of visible sky is reduced. When viewing the night sky, red light-equipped headlamps or flashlights are best.



Half the Park is After Dark

Experiencing moonlight in such a dark place can be extraordinary. However, bright light from the moon means the Milky Way is not visible. The best time to view our galaxy is during the new moon phase or when the moon rises late in the night. The Milky Way is brighter in the summer than in the winter. On summer nights, we face the center of our galaxy and see the combined light of more stars. See the Milky Way directly overhead late in the evening during summer months. In fall, it will appear overhead earlier in the evening. Check with a ranger for current sunrise, sunset, and moonrise times.

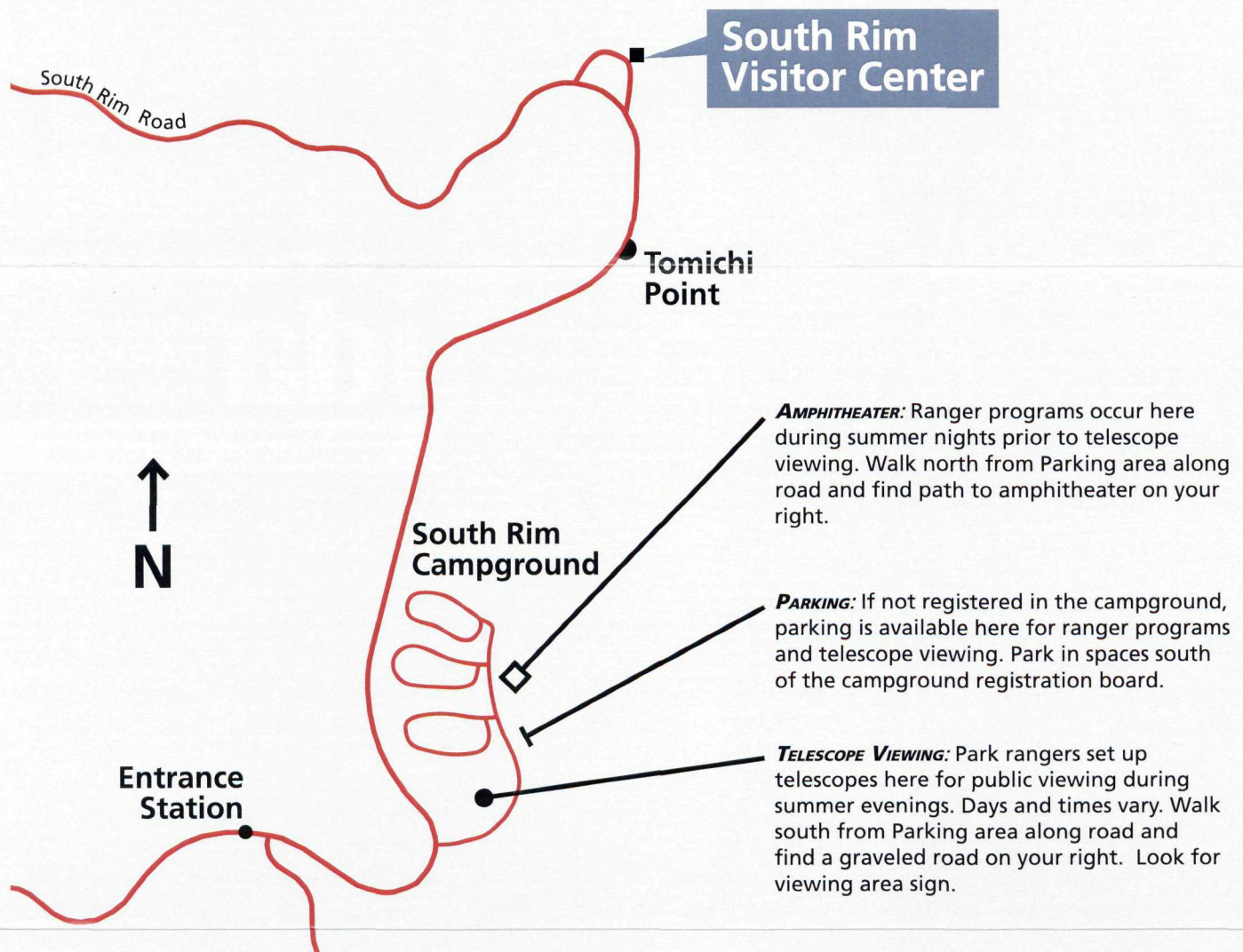
Programs After Dark

Park rangers, volunteers, and members of the Black Canyon Astronomical Society (BCAS) work together to provide astronomy programs. These events occur weekly at the park during the summer. Programs are free to visitors who have paid the park entrance fee. Programs may include talks and night sky viewing with telescopes. Check with a ranger for program offerings or visit the park and BCAS websites: www.nps.gov/blca and www.blackcanyonastronomy.com



Attend our annual multi-day Astronomy Festival!

Navigating the Dark



Finding the Dark Near You

Most constellations and planets that you see at Black Canyon are visible anywhere in the Northern Hemisphere. Tools like planispheres can help track night sky movement through the year for your latitude. Some websites provide monthly sky maps for free. Many communities have astronomy clubs like BCAS. In search of dark skies? Visit the International Dark-Sky Association website (www.darksky.org) to find a Dark Sky Site near you or to find out how you can help protect the night sky where you live.

