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Black Canyon of the Gunnison National Park achieved International Dark Sky Park status in 2015.

Travelers are flocking to the West for what its wide-open spaces lack: light pollution. From savvy rural towns that have gone dark to attract stargazers to protected places where visitors can watch the constellations as the country's original inhabitants did, we break down where—and how—to best enjoy the night sky in the Centennial State. BY JESSICA LARUSSO • PHOTOGRAPH BY GREG OWENS



From top: Westcliffe; Great Sand Dunes National Park and Preserve

DESTINATION: DARKNESS

Westcliffe and Silver Cliff, which together make up Colorado's first certified International Dark Sky Community, show how stargazing can be both a passion and a tourist attraction.

The signs are everywhere. In the Dark Sky Mocha at Sugarlump Co. In the pendants depicting the moon over the Sangre de Cristo Mountains at jewelry-maker Cheryl Swartz's gallery. In the nighttime horse-drawn wagon rides offered by the local Amish community. In the 11-room motel recently renovated and rebranded as the Dark Sky Suites. The heavens above Westcliffe and Silver Cliff aren't the only evidence of the area's status as an International Dark Sky Community. Even before the sun sets on these small, adjacent southern Colorado towns, their identity as a locale where the cosmos are valued, protected, and marketed is clearly visible.

That's largely because of a nonprofit called Dark Skies of the Wet Mountain Valley. The group, founded in 1999 by Suzanne "Smockey" Jack, was concerned that population

growth in the region would come with star-obscuring light pollution. So, the organization began advocating for dark-sky-friendly light fixtures (often shielded, with warmer-hued bulbs) on commercial properties and homes. The astrophiles achieved some success but were still struggling to persuade residents of the importance of the issue when Jim Bradburn, the retired architect behind DIA's iconic roof and an amateur astronomy enthusiast, moved to the area in 2005.

Stringent zoning codes in the bucolic valley, nestled between the Sangre de Cristos and the Wet Mountains, are designed to prevent population density and encourage agriculture: Outside of town, many properties can be no smaller than 80 acres, with just one single-family dwelling. Although those lot sizes help preserve the nightscape, they also draw a demographic that can be resistant to directives. "Living in a rural, ranching kind of community," says Bradburn, who served as Dark Skies of the Wet Mountain Valley's president from 2010 to 2020, "the last thing you want to do is tell them what to do."

Instead, Bradburn focused on educating his neighbors about how they could lower their electric costs with more energy-efficient bulbs and get even more brightness on the ground by, say, adding shields to existing fixtures on their barns to keep light from escaping. Most of the nonprofit's budget (primarily made up of individual donations) went toward paying for these updates. "After about four years,

we started to gain a lot of converts," Bradburn says—including Westcliffe's mayor, who ultimately recognized that tourism dollars could come along with being designated by the Arizona-based International Dark-Sky Association (IDA) as a stargazing destination.

With that in mind, in 2014, each town's city council passed a lighting ordinance (formal regulations that limit light pollution), which is one of the primary requirements for certification as an International Dark Sky Community. Westcliffe and Silver Cliff's joint application was approved in 2015, making the area the first in Colorado to earn the designation from the nonprofit, founded in 1988 to preserve the planet's nighttime environment.

Between that recognition and the debut of the Smokey Jack Observatory (its namesake died of cancer in 2004)—a 144-square-foot wooden structure with a retractable roof designed by Bradburn and tucked into a bluff on the west end of town—word got out. The *New York Times* and NBC's *Today Show* ran stories about Westcliffe and Silver Cliff in 2016, and tourists descended to see the Milky Way and peer at Saturn and dark nebulae through the observatory's 14-inch telescope. Soon, around 100 people were showing up for

the venue's monthly events, guided by Dark Skies of the Wet Mountain Valley volunteers.

To accommodate the crowds, the nonprofit added amphitheater-style seating outside the observatory in 2020. Public star parties (see "Night Life" on page 64) will resume this summer after being suspended during the pandemic, and the group also offers private stargazing sessions for up to eight people. Although the experiences are free, donations are encouraged to help with upkeep and ongoing light-fixture replacement efforts. Most of this season's small-group slots have already been reserved, but with more Colorado towns and parks earning dark-sky certifications every year, competition for tourists is increasing.

That's great news, of course, for advocates, and Dark Skies of the Wet Mountain Valley has even helped other locales with their applications. But the area continues to look for ways to stand out, and to that end, visitors this summer will discover new interpretive signs mapping out our solar system at a scale of four billion to one. Starting with a 14-inch-diameter sun, the walking portion of the trail (through Neptune) spans just more than a mile of Westcliffe's quaint Main Street; it's then a 3.5-mile drive or bike ride to find the dwarf planets in Silver Cliff. "To me, what we need to do is just keep making attractions that make Westcliffe and Silver Cliff unique," Bradburn says. "At the same time, we can't lose our original thought, which was to preserve the night sky."

5 Counties (Saguache, Alamosa, Costilla, Huerfano, and Custer) spanned by the proposed 3,800-square-mile Sangre de Cristo Dark Sky Reserve, which, if approved by the IDA, would include the Wet Mountain Valley

From left: Courtesy of Scott Donkoff; Greg Frazley/Last Light Images

International Dark Sky Communities

1. Westcliffe and Silver Cliff, 2015
2. Norwood, 2019
3. Ridgway, 2020
4. Crestone, 2021
5. Nucla and Naturita, 2021

International Dark Sky Parks

6. Hovenweep National Monument, 2014
7. Black Canyon of the Gunnison National Park, 2015
8. Dinosaur National Monument, 2019
9. Great Sand Dunes National Park and Preserve, 2019
10. Jackson Lake State Park, 2020
11. Slumgullion Earth & Sky Discovery Center, 2020
12. Florissant Fossil Beds National Monument, 2021
13. Mesa Verde National Park, 2021
14. Curecani National Recreation Area, 2021
15. Top of the Pines, 2021

SHINING STARS

Colorado currently claims 15 of the world's 196 International Dark Sky Places, which are broken down into categories with varying requirements for certification by the International Dark-Sky Association.

International Dark Sky Communities

Municipalities—often in rural areas where there is already good stargazing—that adopt outdoor lighting ordinances and educate residents about the value of dark skies

Urban Night Sky Places

Public sites, such as city parks, in or near significant artificial light that showcase natural nighttime experiences by demonstrating responsible lighting practices

International Dark Sky Parks

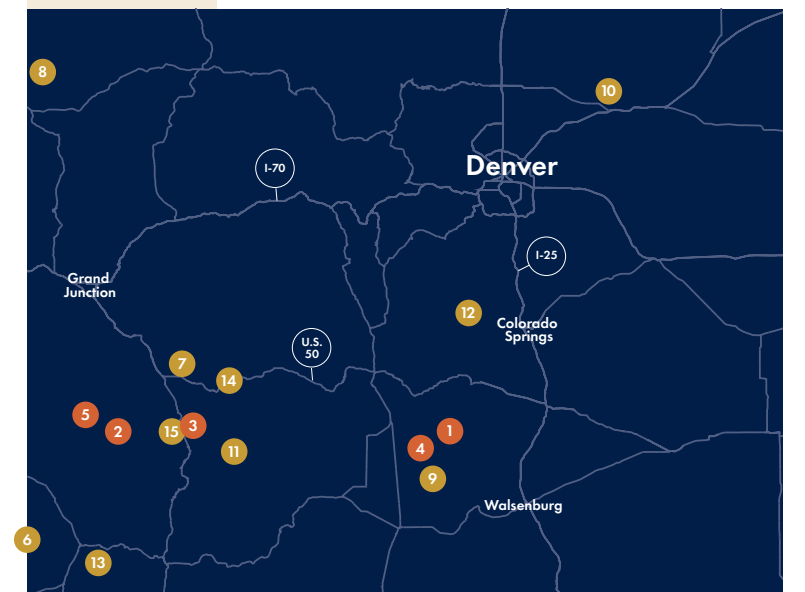
Publicly or privately owned protected spaces that implement dark-sky-friendly lighting and programs for visitors, who should be able to see the Milky Way with unaided eyes

International Dark Sky Reserves

Very dark, protected areas surrounded by populated peripheries where land managers agree to various measures to preserve the night sky of the core

International Dark Sky Sanctuaries

The most remote (and often darkest) places in the world, mostly untouched by humans; no sky glow is visible



Dark-sky-friendly public lighting preserves Ridgway's nightscape.

EVERYTHING IS ILLUMINATED

Why curbing light pollution is about so much more than seeing the stars.

Eighty percent of Americans and a third of the planet's residents live in places where our home galaxy is no longer visible, according to a widely cited 2016 study published in *Science Advances*. "Growing up in Colorado, it never occurred to me that there are billions of people in urban areas where they can't see the Milky Way," Ridgway Mayor John Clark says. "If they were brought to Ridgway on a moonless night, they'd be scared to death." Alien invasion fears aside, anyone who's been engulfed by a dark night sky knows how transformative it can be. The authors of the light pollution study (three of whom are from the Front Range) likely want all of humankind to be able to gaze into the cosmos and feel insignificantly small yet universally connected. But they also hope their work will inform research in a variety of fields where there is increasing concern about the negative impacts of artificial light.

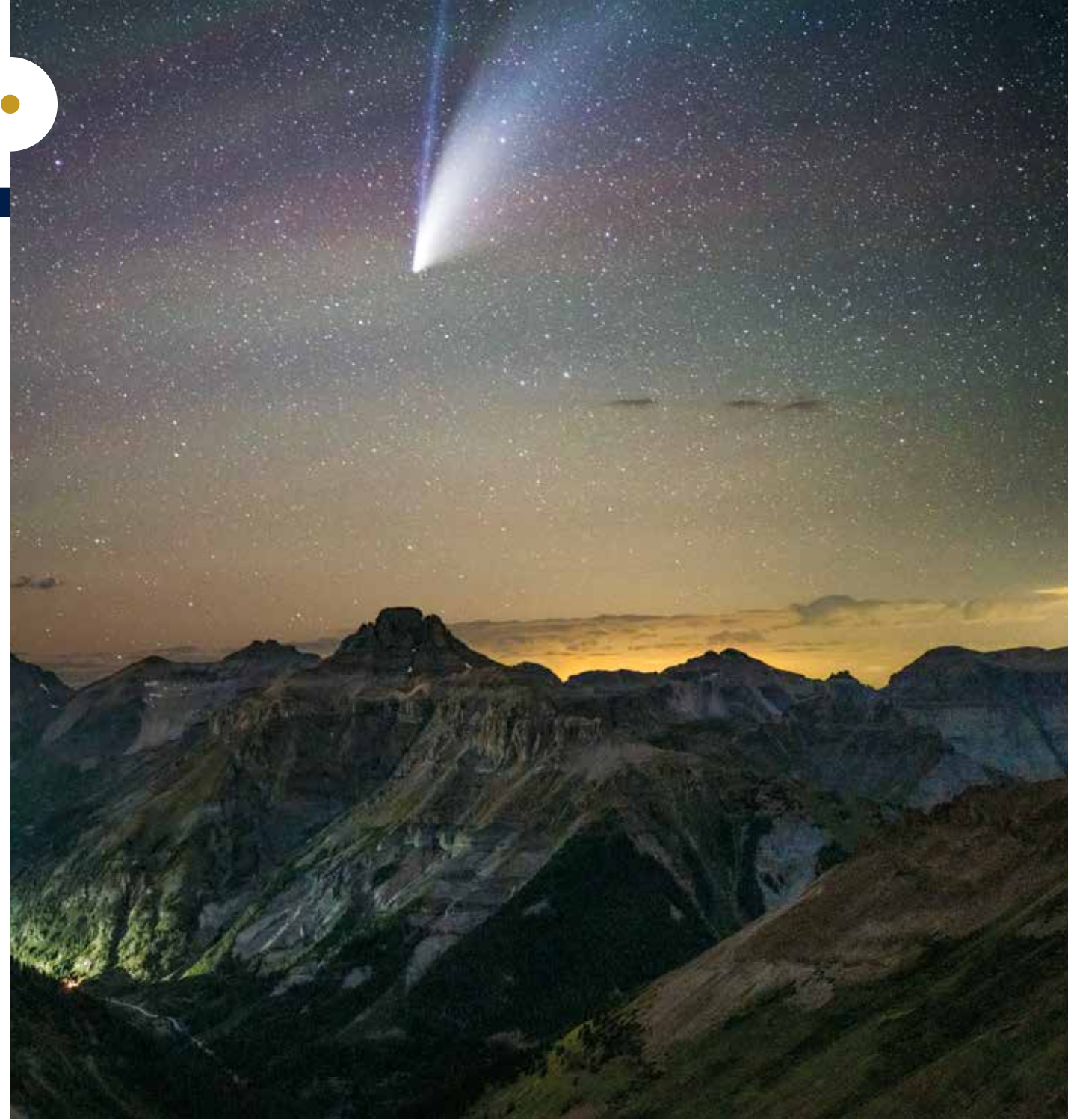


Wildlife For billions of years, all kinds of critters evolved with only the moon and stars shining at night. Light cues myriad animal activities; studies show varying levels serve as signals for when it's time to find food, mate, migrate, or pollinate plants. The relatively recent introduction of 24-hour brightness, whether it's a floodlight on a backyard shed or the skyglow from cities that can travel more than 100 miles, has caused disruption and death across many species. In fact, the IDA's *Artificial Light At Night 2022* briefing calls light "one of the most pressing and imminent threats to global biodiversity."

Human Health The medical community doesn't agree on exactly how, and how much, artificial light affects the body. The most concrete consequences, however, seem to come from exposure to short-wavelength light—the bluer kind emitted by electronic devices and many energy-efficient bulbs. When this light hits the retina, it's especially effective at suppressing the production of melatonin, a hormone that promotes sleep; among other conditions, insomnia has been linked to hypertension, diabetes, and depression. Artificial light at night also disrupts the body's circadian rhythm, a kind of internal clock that regulates many biological processes.

Climate Change As the IDA's report says, "wasted outdoor light at night is wasted energy"—and because much of the world's energy is still generated by fossil fuels, that excess is a significant contributor to global warming. Although solid-state lighting (e.g., LEDs) has been hailed as a green solution, the fact that it is cheaper and more convenient has led to an increase in consumption that may have negated its environmental benefits. Thus, the most eco-friendly light is still the one that's only used when and where it's needed.

3,000 The maximum color temperature, in Kelvins, dark-sky advocates recommend using outdoors. Lower numbers equal warmer colors (light that looks orange or yellow); a candle's flame, for example, is about 2,000 Kelvins. Blue-white fluorescent kitchen lights are often around 3,500 Kelvins, and lighting in commercial spaces can exceed 6,500.



CITY LIGHTS

In addition to annoying your neighbors, illumination after dark can be disorienting for birds. Launched in April 2021, Lights Out Colorado is an initiative to encourage urban dwellers to shield outdoor lights and turn them off before midnight during peak migration (April, May, August, and September). Here, five more tips for reducing your impact at home.

1. Consider alternative solutions, such as reflective paint or luminous markers, to permanent outdoor light fixtures where appropriate (think: sidewalks, curbs, and steps).
2. Employ timers or motion detectors to make sure lights go off when they're not in use.
3. Choose warm-color-temperature bulbs rated at fewer than 3,000 Kelvins.
4. Understand that light may reflect up from the ground, even if a beam is appropriately shielded, and take that into account when determining, for example, how bright your front porch light really needs to be.
5. Be mindful of your interior lighting spilling outside, a phenomenon fueled by the popularity of giant glass sliding doors and windows—especially in mountain resort towns.

TIMELINE

THE PATH TO THE DARK SIDE

Every International Dark Sky Place's journey to certification is different, but southwestern Colorado's Ridgway is an enlightening case study.

- 1997 In response to pressure from passionate area residents, Ridgway's town council passes a lighting ordinance that requires all outdoor fixtures to be fully shielded, meaning light is contained and reflected down at the ground.
- 2003 The city replaces its energy-sucking mercury vapor street lamps with high-pressure sodium fixtures, which are more efficient and emit orange-colored light.
- 2016 The CO 62 corridor downtown undergoes a major renovation. All of the project's lighting—including 66 short pathway lampposts—is designed to limit light pollution.
- March 2018 The town's new master plan prioritizes dark-sky preservation and sets the goal of IDA certification.
- May 2018 The city staff begins updating Ridgway's outdoor lighting ordinance to meet the IDA's standards, which include limits on brightness for residential and commercial buildings.
- May 2019 After holding two such events in 2018, Ridgway hosts its third star party, in part to fulfill the IDA's community outreach requirement. It includes residential exterior lighting guidance, a PowerPoint presentation about the importance of dark skies, and telescope-assisted outdoor viewing.
- September 2019 The revised outdoor lighting ordinance is approved. Some changes, such as dimming the pathway bollards, are made, and the city commits to replacing 24 remaining streetlights that exceed the IDA's 3,000-Kelvin threshold within five years.
- February 2020 Ridgway submits its 80-page application, a collaboration between town staff and local volunteers. It includes media clips covering the town's efforts, sky brightness measurements from four sites within city limits, compliance examples (demonstrating how violations of the lighting ordinances have been addressed and rectified), and letters of support from community members and local businesses.
- July 2020 The IDA names Ridgway the state's third International Dark Sky Community and the 28th in the world.



This spread, from left: Rolf Nussbaumer Photography/Alamy Stock Photo; Jack Brauer; Seth K. Hughes

From top: Southwestern Colorado's La Plata Mountains; Lake City



CAPTURING THE COSMOS

Bettymaya Foott's title is director of engagement for the IDA—but the Durango resident also shares her passion for protecting the night sky in a less official capacity with the more than 6,300 people who follow her astrophotography account on Instagram (@bettymaya.foott). We asked her to teach us how to play paparazzi to a different kind of stars.

GEAR UP

If you plan to create large prints, a DSLR or mirrorless setup will work best, but newer smartphones (Foott recommends Google's Pixel) with night mode take great images, especially when paired with a sturdy tripod. Be sure to use a two-second timer or remote shutter so vibrations from your finger don't mess up your shot.

Ideal shutter speed, in seconds, for DSLR or mirrorless cameras; longer exposures capture the trailing of the stars. Also, set your aperture as wide as it will go.

20-30

CONSIDER THE CONDITIONS

A few clouds can be a fun accent, but to predict when the heavens will be the least obscured, Foott recommends checking the hourly charts at cleardarksky.com. Built for amateur astronomers, it forecasts the weather at observation sites across Canada and the United States, including 166 locations in Colorado.

SCOUT IT OUT

Investigate your location during the day so you're not stumbling around for the first time in the dark. Foott likes to find an interesting foreground element—a tree, a tent, a cool rock formation—and then think through where celestial objects will be in relation to it. "If you're trying to catch the galactic core of the Milky Way in the spring," Foott says, "it'll be on the southeast horizon in the early hours of the morning." Summer is the easiest time to photograph our home galaxy because it's visible, directly to the south, almost from sunset until dawn. In the fall, it's on the southwest horizon.

SHOOT FOR THE MOON

To capture delicate phenomena such as faint constellations and airglow (dusty light emitted by the planet's

atmosphere), you'll want to go out during a new moon, before Earth's natural satellite rises, or after it sets. Images taken during a full moon come out looking like daytime with a few stars in the sky. But the in-between moon phases can be especially dramatic. "What I really love to do is to use a crescent moon to light up my foreground without totally obscuring the Milky Way," Foott says. "That adds a lot of dramatic angled lighting you just don't get from starlight."

GO NATURAL

Speaking of lighting: Be aware that light painting, a technique in which artificial light (such as your smartphone's flashlight or a strobe) is used to illuminate a foreground element, can disrupt nocturnal wildlife as well as other stargazers. Some parks—including Arches National Park in Utah—have even banned the practice. Instead, Foott says, "shoot during blue hour, which is when the sun is four to six degrees below the horizon. It's dark enough that you can see the Milky Way, but the sun isn't fully set, so there's still light refracting through the atmosphere; it makes the sky blue and gives you really nice, soft light on your foreground."

This spread, from left: Bettymaya Foott; Hamnu & Hannele/Getty Images

UNDER THE SUN

All of Colorado's International Dark Sky Places—and some remote spots that aren't officially certified—have stellar views at night. So, consider choosing your destination based on what you like to do during the daylight hours.

IF YOU'RE INTO...

BIRD-WATCHING

GO TO: Jackson Lake State Park

BECAUSE: At this popular RV camping destination, just 1.5 hours northeast of Denver, visitors who train their eyes on the sky while the sun is out may be rewarded with glimpses of orioles, Swainson's hawks, and whooping cranes.

DISC GOLF

GO TO: Top of the Pines

BECAUSE: Nestled at the base of the Sneffels Range, this recreation area's 175 acres contain a new-in-2020 nine-hole course (the back nine is expected to open late this summer) designed by a landscape architect from nearby Ridgway.

CAMPING

GO TO: Lake City

BECAUSE: Southwestern Colorado's Hinsdale County is 96 percent public lands. Lake City, its only town, is home to the Slumgullion Earth & Sky Discovery Center, which has its own stargazing-friendly campground—book a site via Hipcamp—and hosts telescope-assisted astronomy tours on summer Wednesday nights at nearby Windy Point Observation Site.

PALEONTOLOGY

GO TO: Florissant Fossil Beds National Monument

BECAUSE: You can explore 14-foot-wide petrified redwood tree stumps and see insect and plant fossils, preserved in shale deposits 34 million years ago, before looking through a telescope provided by the Colorado Springs Astronomical Society, which frequently hosts events at the monument.

SNOW-SPORTS

GO TO: Cuchara Mountain Park

BECAUSE: This 47-acre former ski resort—part of the proposed Sangre de Cristo Dark Sky Reserve—northwest of Trinidad is being converted into an environmentally sensitive recreation facility. Snowshoeing and skiing trails abound (and are open for hiking in the summer).



From top: Hovenweep National Monument; Chimney Rock National Monument

UNIVERSAL TRUTHS

Archaeological sites in Colorado contain many clues as to how closely ancient Indigenous peoples may have watched the skies—but in most cases, the exact intents behind their structures remain a mystery.

Sometimes, as seen from the vantage of the Great House Pueblo at Chimney Rock National Monument, the full moon rises in a narrow gap between the monument's namesake twin stone pillars near Pagosa Springs. In fact, the phenomenon occurs only on certain nights, when the moon rises farther north than usual, during the northern major lunar standstill (MLS)—a period of 36 months that comes around every 18.6 years.

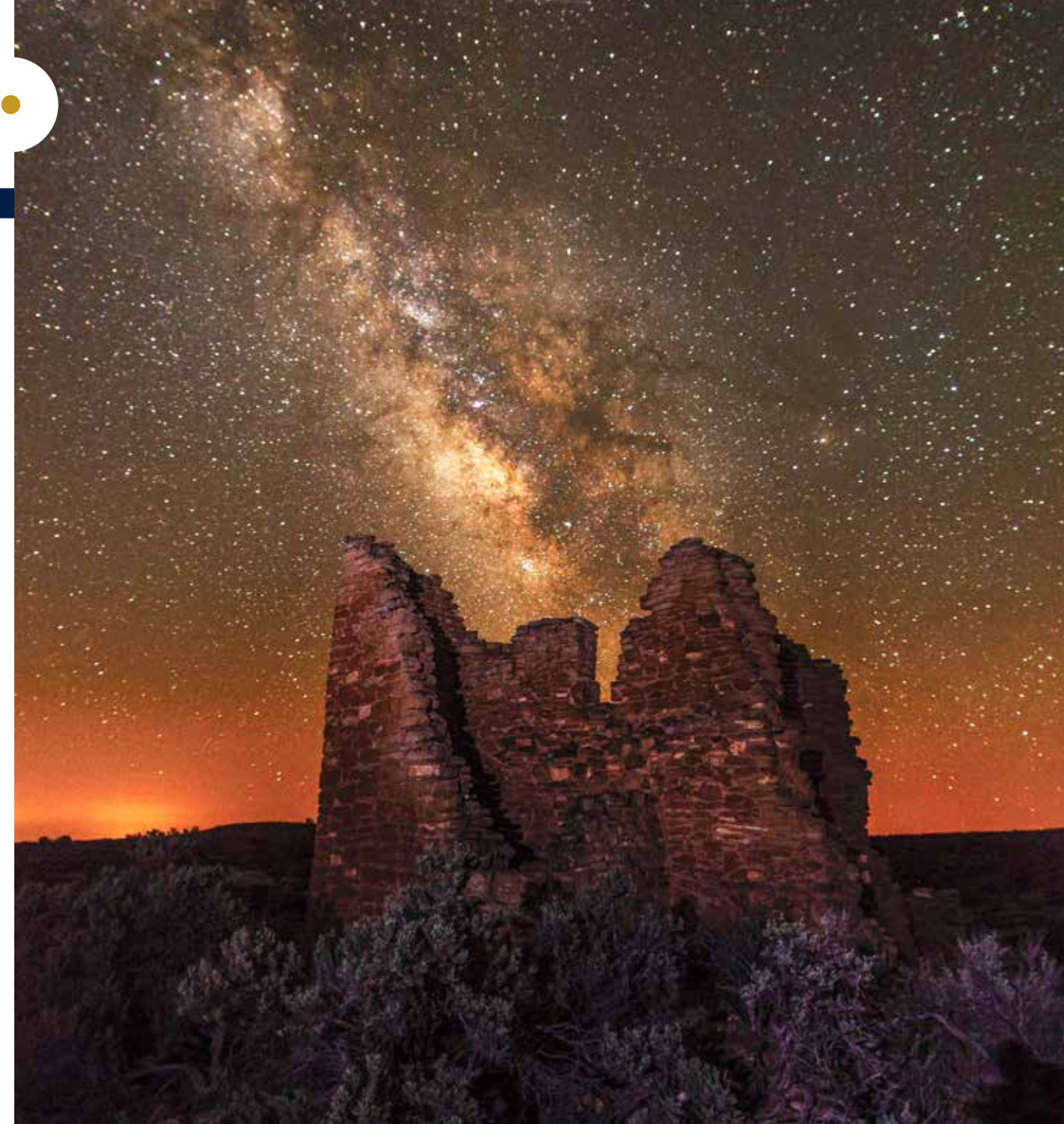
Could the Great House's view be a coincidence? Or did the Ancestral Puebloans, who lived in what is now the Four Corners region more than 1,000 years ago, build this structure with the MLS in mind, as University of Colorado Boulder professor J. McKim Malville proposed in 1987? Such claims of celestial alignments—when human-made objects correlate perfectly with cosmic events—have faced criticism for imposing contemporary biases and failing to consider the histories and stories of living tribal members. In this case, however, significant evidence bolsters Malville's hypothesis: The Great House, situated high on a ridge and inconveniently far from



water and food sources, is thought to have been constructed and/or extensively remodeled in 1076 and again in 1093, during northern MLS events, based on tree-ring dating of wood samples. Additionally, research at other Ancestral Puebloan sites—including Mesa Verde National Park, Hovenweep National Monument, and Chaco Culture National Historical Park (an International Dark Sky Park in New Mexico)—suggests that solar and lunar cosmology may have influenced architecture in those places around the same time.

"We know that across the Pueblo world, people were building structures that reflected and aligned with astronomical events and helped them keep track of the seasons," says Spencer Burke, a ranger and visual information specialist at Mesa Verde. "We know that people at Mesa Verde were paying close attention to the stars. We don't know exactly what that looked like." Although the findings are not currently endorsed by the park's archaeologists, various researchers have proposed that Sun Temple—which sits atop a mesa across from Cliff Palace, the park's largest cliff dwelling—was constructed for astronomical observation. They point to details such as how four towerlike features may have aligned with where celestial bodies sacred to

Existing seasons of the Mesa Verde Voices podcast, a collaboration among the park, the Mesa Verde Museum Association, and Cortez-based public radio station KSJD. The fifth season, which will focus on dark skies with an emphasis on Native perspectives, is expected to start dropping episodes on Apple Podcasts and Spotify sometime this year.



the Ancestral Puebloans rose and set. Similarly, archaeoastronomers have suggested that the small windows in Hovenweep's towers were placed to help residents track the sun's progress toward the solstices, based on the shifting of light and shadows within.

"Intentionality' is the key word here," says Erica Ellingson, an associate professor emeritus in CU's department of astrophysical and planetary sciences who's done fieldwork at Chimney Rock and Chaco. "We can go to these beautiful places and measure the orientations of some of these structures and say, well, here's a relationship between a structure that we see today and something that we know happened in the sky in the past. But the question is whether these edifices were built in an intentional way."

From left: Courtesy of Chimney Rock Interpretive Association/Howard Rowe; NIS/Jacob W. Frank/Alamy Stock Photo

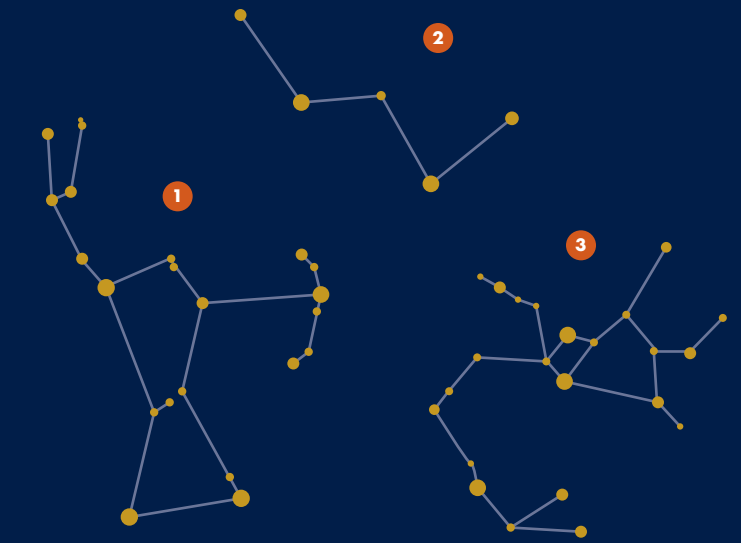
Still, scientific certainty isn't required to be awed while watching the full moon ascend between Chimney Rock's spires from the Great House. It's an experience the national monument hopes to be able to offer to the public soon, as we enter the northern MLS this year, but because some of the best viewing opportunities are in the winter, when the dirt road to the site is often closed, there are logistical hurdles to hosting such events. Until then, astrophiles can enjoy the monument's monthly full moon program (through September)—which features a sunset lecture and Native American flute music atop Chimney Rock Mesa—and observe the heavens in places like Mesa Verde and Hovenweep, where preserving the dark night sky that ancient Indigenous people enjoyed is as important as protecting the archaeological sites on the ground.

RELATED NAVAJO CONSTELLATIONS

The young warrior
Átsé Ets' ózi

The motherly
Náhookos Bi'áád

The bear
Shash



WRITTEN IN THE STARS

The stories of Greco-Roman gods aren't the only ones hidden in the night sky.

Since time immemorial, humans across the globe have connected the brightest dots in the heavens, finding forms significant to them. The United States' original inhabitants are no exception, and thanks in part to groups like Minnesota's 13-year-old nonprofit Native Skywatchers, whose mission is "to remember and revitalize Indigenous star and Earth knowledge," interest

Orion: A kneeling hunter, poised to attack Taurus, the bull; easily identified by the three bright stars of his belt

Cassiopeia: A queen bound to a chair that revolves around the North Star; her W-shaped stars are always opposite the Big Dipper

Sagittarius: A centaur (part man, part horse) holding a bow and arrow near the center of the Milky Way

in Indigenous astronomy has recently grown. Not all tribes have chosen to speak publicly about their star stories, however, and those who do sometimes follow cultural protocols that such information should only be transmitted at certain times of the year. In Nancy C. Maryboy and David Begay's fourth edition of *Sharing the Skies*—a guide to constellations important to the Navajo, or Diné, whose homeland is in the Four Corners area—the introduction specifies that "the coming of the first thunder signifies the emergence of spring, at which point the Winter Stories are no longer told." As such, we won't relay the full tales here; however, these Greco-Roman constellations have stars in common with Navajo groupings you can, and should, research and add to your stargazing checklist.

From top: The Central Idaho Dark Sky Reserve; Westcliffe's Smokey Jack Observatory; taiko drummers in Crestone

NIGHT LIFE

Mark your 2022 calendar for some of the state's best and brightest celestial celebrations.

● MAY–SEPTEMBER

The Smokey Jack Observatory in southern Colorado's Westcliffe hosts shindigs nearly every weekend during the summer. Visit darkskiescolorado.com/events to see the lineup: There are star parties with themes such as spring constellations and the Andromeda galaxy; electronic-

assisted astronomy sessions, during which live images from the observatory's telescope are projected onto a 10-foot-wide screen you can watch from the adjacent amphitheater; night-sky photography workshops; and daytime solar observations with special filters for viewing the sun. You can



even tune in virtually via livestreamed telescope footage on the Dark Skies Colorado Facebook page. *Free; donations to Dark Skies of the Wet Mountain Valley are encouraged*

● MAY 15

At 9:29 p.m., the moon will begin to enter the Earth's shadow. Thanks to the Colorado Springs Astronomical Society (CSASTRO)—one of the largest and most active amateur astronomy groups in the state—you can watch the total lunar eclipse while on a guided 3.2-mile night hike through Cheyenne Mountain State Park. Or hang out in the Limekiln trailhead parking lot with the Colorado Springs-based Mobile Earth Science Observatory's telescope-equipped, 26-foot RV. CSASTRO volunteers will also be there to show you how to use their equipment and your smartphone or a DSLR or mirrorless camera to capture images of the moon. *Free with park pass; advance registration required only for the hike (call the visitor center at 719-576-2016)*

● MAY 20–21

The second annual Experience the Night festival in Crestone will celebrate one year since the San Luis Valley town received International Dark Sky Community status. On Friday evening, a variety of



30 Minutes it can take for your eyes to readjust to the darkness after exposure to white light. Red-filtered headlamps and flashlights (many events have red cellophane on hand) are encouraged if you need illumination to navigate stargazing destinations after sunset. Arriving late and blasting everyone with your car's headlights is particularly frowned upon.

performers—taiko drummers from the Shumei International Institute's campus nearby, an aerialist, local students reading poetry—will kick off the evening at the Colorado College Baca Campus before professor of physics Shane Burns gives a laser-assisted tour of the constellations above. Learn more about what you saw and enjoy live music, food, and artisan craft vendors at Saturday's street fest downtown. *Free*

● JUNE 22–26

For more than three decades, night-sky enthusiasts have been coming to CSASTRO's 35-acre property in the Wet Mountain Valley near Gardner for its annual Rocky Mountain Star Stare. Aptly dubbed Starry Meadows, the site has plenty of space for tents and RVs, and CSASTRO brings in mobile food vendors and speakers. (Last year's lineup included retired NASA astronaut Harrison Schmitt, who walked on the moon during the Apollo 17 mission.) An astrophotography contest, telescope-building displays, and paper rocket workshops for kids keep attendees busy during the day, while the Milky Way headlines at night. *Starting at \$65 for adults and \$30 for children 13 and up; kids 12 and younger get in free*

● SEPTEMBER

Dates and details weren't set at press time, but in the past, the 12-year-old Black Canyon Astronomy Festival's night-sky tours and lectures have taken place on the south rim of Black Canyon of the Gunnison National Park in September. Mesa Verde National Park plans to bring back the Mesa Verde Dark Sky Festival—a celebration of its status as the IDA's 100th park—midmonth for a second year. 2021's weeklong event included talks by astrophysicists and park rangers and an astrophotography workshop. Don't miss your chance to take in the nightscape from Park Point, the highest spot in Mesa Verde, which is newly open after sunset as of this summer. *Free with park pass*



SPACE TRAVEL

The American West has the highest concentration of International Dark Sky Places in the world. If you're up for a road trip, these spots are worth blasting off to from Denver.

1. Across the New Mexico border, **Capulin Volcano National Monument** has been an International Dark Sky Park since 2016. In addition to telescope-assisted viewing events most Saturday evenings during the summer, rangers offer guided monthly moonlight hikes with advance reservations. 271 miles
2. Although being in a place called **Goblin**

Valley State Park after sunset might sound spooky, it's worth it for the dramatic shots you'll get of the Milky Way rising over thousands of hoodoos (rock spires) in this southeastern Utah International Dark Sky Park. 392 miles

3. **Antelope Island State Park** is located on the largest island (accessible via a narrow, two-lane road) within Utah's Great Salt Lake. Explore the



International Dark Sky Park's 28,800 acres—home to bighorn sheep, pronghorn antelope, and bison—by foot, horseback, or bike before enjoying the cosmos' reflection on the water. 528 miles

4. New Mexico's **Cosmic Campground** International Dark Sky Sanctuary, within the Gila National Forest, has eight sites, four concrete pads (BYO telescope), and no significant artificial light within 40 miles. 648 miles

5. In 1958, **Flagstaff, Arizona**, enacted the world's first outdoor lighting ordinance, and the

city (current population: 76,831) became the IDA's first International Dark Sky Community in 2001. Go to see how a metropolis can limit light pollution and to visit the Lowell Observatory, where Pluto was discovered. 678 miles

6. Whether you drive or catch a direct flight from DIA to Sun Valley, visiting the **Central Idaho Dark Sky Reserve** will make you feel like you've traveled back in time. Many of its 1,416 square miles in the Sawtooth Mountains' backcountry lack infrastructure, electricity, and (thank the heavens) cell service. 746 miles ▲▲

Clockwise from top, left: Courtesy of Deb Adams; Nils Ribi Photography/Courtesy of Idaho Dark Sky Alliance; Courtesy of Lori Nagel/Sunflower Studios