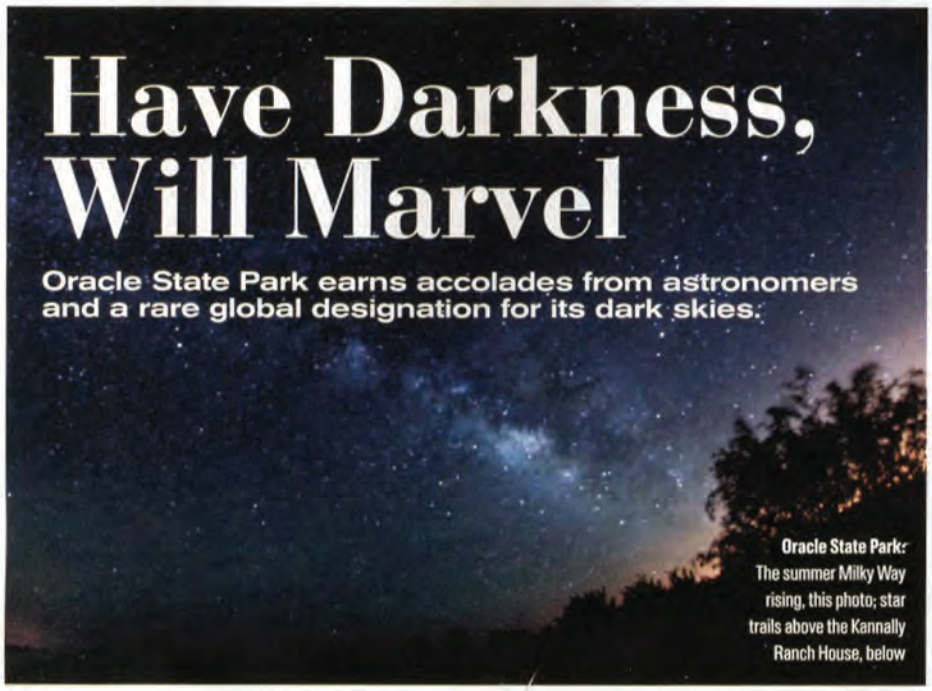
| BY ASHLEY M. BIGGERS

Have Darkness, Will Marvel

Oracle State Park earns accolades from astronomers and a rare global designation for its dark skies.



Oracle State Park: The summer Milky Way rising, this photo; star trails above the Kannally Ranch House, below

THE HEAVENLY DISK of the Milky Way can be seen clearly in all seasons as it glides above Oracle State Park, 40 miles north of Tucson. In this age of blazing LEDs and fluorescents, it's a seldom seen sight – so unusual, in fact, that Tuscon-based International Dark-Sky Association (IDA) named the park an International Dark-Sky Park in November 2014, recognizing it as a world-class destination for starry-sky viewing.

Oracle is one of only 20 locales across the globe to earn the accolade from the nonprofit advocacy and education group, which awards designations in tiers, with the gold tier being the highest. Arizona has two noteworthy destinations; the other is Parashant International Night Sky Province in rural northwestern Arizona, also listed in 2014. Fifteen International Dark-Sky Parks lie in the U.S., most in the Southwest and Rockies, where low population density, large tracts of undeveloped lands and relatively low humidity make sky viewing easier.

Oracle State Park has these qualities and more. It's the Goldilocks of parks: Oracle is close enough to urban centers that millions of visitors can see its skies (Casa Grande is 84 miles north) yet remote enough to be protected from the light glow that would otherwise dim the cosmic view.

IDA requires designated places are not only free of the yellow haze of light pollution, but also have a plan to preserve their dark skies in the future. Mike Weasner, who retired in Oracle in part because of its astronomy potential and operates a pop-up SkyShedPOD observatory, organized the application committee. He says the 3,948-acre wildlife refuge already had minimal lighting; however, area business owners and park neighbors voluntarily opted to turn off, switch, or shield their lighting systems to minimize the glow further. Still, the park landed at the silver, rather than gold-tier level. "From all the things the park had – its education program, access, facilities – it was at the gold level, but when we started reading [and] measuring the sky quality with a light meter we found a lot of dust and particulate matter," Weasner says. "We're thrilled to get the designation at all, and the silver has given us an opportunity to see how to pursue gold in the future."

The park's educational workshops also boosted its successful application. Oracle State Park overachieved in this category, given that it already functions as a center for environmental education. In the past, the park hosted several sky viewing parties, during which amateur astronomers set up telescopes at the Kannally Ranch House and allowed visitors to view constellations, nebulae and other phenomena. In June 2013, during the application process, the park hosted a star party for 350 visitors. In the future, Park Manager Steve Haas says the park will plan quarterly or perhaps monthly gatherings, including a party for the official IDA announcement this month.

Star parties have become customary at Arizona State Parks; today nine parks host such events. Oracle stakeholders – including astronomers such as Weasner, Haas and IDA Program Manager Dr. John Barentine – want the International Dark-Sky Park designation to become standard among Arizona State Parks, too. The parks system is exploring the possibility. "We are doing an assessment of other parks to see if they also possess exceptional starry skies that would meet the International Dark-Sky Association criteria," spokeswoman Monica Enriquez says. Exploratory establishments such as Tucson's Planetary Science Institute and Mount Lemmon SkyCenter and Lowell Observatory in Flagstaff have also traded on Arizona's dim light.

Sky watchers aren't the only ones who stand to gain from preserving and protecting these dark skies. Light pollution disrupts nocturnal animals' reproduction and hunting behaviors, birds' migratory patterns and humans' circadian rhythms, to name a few of the detrimental effects.

But for astronomers like Mike Weasner, this preservation honorarium means he – and generations after him – will be able to continue to watch the Milky Way turn across the sky in awe-inspiring, unimpeded brightness.

DARK-SKY DETOURS

Oracle State Park will host a Star Party on Saturday, March 21, to celebrate the park's designation as an International Dark-Sky Park. Event times and details were not available at press time but will be available on the park's website, *azstateparks.com/Parks/ORAC*.

DARK-SKY VIEWING TIPS

TAKE A ROAD TRIP!
To view the most and brightest stars, you'll need to get away from light pollution and sky glow common in metropolitan areas.

CHECK THE WEATHER.
Cloudy or hazy skies make for poor star viewing. Check websites like Star Date (***stardate.org/nightsky/weekly***) and EarthSky (***earthsky.org/tonight***) to discover which phenomena will be visible at any given time.

BUY A PHYSICAL PLANISPHERE (STAR MAP), or download an app that does the same, to be your guide to the planets and constellations. Be sure to find one specific to Arizona's longitude and latitude.

PHOTOS COURTESY ARIZONA STATE PARKS/MICHAEL WEASNER