



Distinctive Image

featuring...

Janis Maguire, FPSA, MPSA
California



Arch Rock Joshua Tree Trails

Janis Maguire, FPSA, MPSA, was selected as the Distinguished Artist for this month because of her long history of service to PSA and photography and her impressive photographs. At first she particularly enjoyed sports and action photography and occasionally did animal/pet portraiture. Her other main loves have been outdoor landscapes, wildflowers and wildlife. However, for the last three years she has become fascinated by dark starry nightscapes and those are the distinguished images that will be featured here this month.

Jan's service to PSA includes serving as Nature Division Star Ratings Director and Photojournalism Division Exhibition Standards Director, writing for the *PSA Journal*, serving on the Honors Committee and an ad hoc committee about digital truth, and serving as a presenter at several PSA conferences. She has served as a judge for many exhibitions and has shared her photography skills by presenting programs, workshops, field trips, and classes over many years.

Awards and honors earned by Jan are: 1 gold editorial star; 4 stars in the Pictorial Print and Travel Divisions; a galaxy in the Photojournalism

Division; a Diamond in the Nature Division; 8 Color Galaxies; EPSA in 2000; MPSA in 2013; Distinguished Fellow in the Southern California Council of Camera Clubs; Artist in Residence at The Living Desert Zoo and Botanic Garden in Palm Desert, CA; attained top 25 ranking 19 times in PSA's *Who's Who* annual listings.

In addition to all of these honors, Jan has had almost 3,000 hangings in international exhibitions with over 150 medals and trophies. She has also held two one-man shows of her photographs and sold a line of photo greeting cards for over ten years. Her photos and articles have appeared in various local newspapers and trade magazines, calendars for a local botanic garden and for The Nature Conservancy, and in a book on the geology of our national parks as well as in the *PSA Journal*.

Jan earned her B.A. degree from the University of California, Irvine and did graduate work in education at the University of Hawaii. Most of her working career was spent in personal computer support and in global high-tech information systems networks. Then she "semi-retired" to work in a retail camera specialty store where she worked on the sales floor,

taught camera and photography classes, led field trips, and did tutoring. From this she started a successful local interest group on a well-known photo sharing website, which is still continuing.

With Jan's background in office systems and computers and her long-time photographic hobby, she found herself completely at home with the post-processing end of photography as the digital age evolved. One of the classes she taught was about organizing and backup strategies. Having printed color cibachromes and black and white images for almost fifteen years in her traditional darkroom, she has been astounded at how quickly she can make minor fixes in digital to an image she might previously have tossed or spent hours printing and reprinting and dodging and burning. Her night sky photography is certainly the epitome of that evolution.



Devils Garden Escalante



Sabrina Star Trail and Milky Way



Arches Pano

Technique Statement

Several years ago, I got hooked on photographing the night sky. Really, digital cameras made this possible—I can see what I'm doing, make corrections, and the camera is capable of gathering quality light far beyond anything I ever experienced with films.

First, I have to find a dark sky around the New Moon, with a potentially interesting foreground. This is the big one. I search out the area before I leave home and check the weather, looking for clear, of course. I visit the area in daylight hours and analyze with my compass for foreground possibilities. I try to visualize how the area will look in the dark—will I find my way around? Can I get lost? Are there cacti or other things on the ground that could cause me harm if encountered in the dark of night?



Mobius and Milky Way

Secondly, I decide on my options: Will I shoot a simple image of a starry dark sky, perhaps the spread of a glorious springtime Milky Way?; a series of multiple images over time, which I then can stack in post processing to get a set of star trails?; perhaps one step further and gather the series of images to be compiled into time-lapse video?; or maybe I'll use a couple of cameras and shoot all of the above.

Finally, except for the single-image scenario, there will then be some work on the computer.

A decent exposure of an unpolluted night sky is typically around 20 seconds, F2.8, ISO 6400, or any variation with faster glass. One decision is about whether I'm gathering a long series to string together as star trails, or whether I want a single image with pinpoint stars. There's actually a rule of thumb that has to do with focal length—since the earth is moving, the longer the focal length, the shorter the shutter value must be if I want the stars to show as pinpoints. The speed the earth is moving becomes pretty obvious if I try to shoot the moon, for example, with a 1000mm lens - it's not long before the moon moves out of the viewfinder. The rule of thumb is something like this: the shutter speed value should not be more than 500 divided by focal length. So, if I use a 35mm lens, my shutter speed value shouldn't be more than about 15 seconds (actually, $500 \div 35 = 14.3$). If I use a 14mm lens, I could get away with a shutter speed of 35 seconds before my stars start to look like streaks instead of pinpoints.

If I'm after star trails, I'm not concerned with the streaking, so I can use shutter values of 30 seconds, put the camera in continuous shooting mode, and lock the shutter with a cable release. The camera will just keep on going till I've had enough. And what IS enough? I like at least an hour for star trails, two or more is better for time-lapse. For star trails (and time lapse) I use a fast wide lens, F2.8, ISO 3200, 30 seconds.

Some additional settings are: manual focus, set the lens at the infinity mark (I even tape it so I don't accidentally move it), manual exposure, a manual white balance of 3700-3900K, long-exposure noise reduction turned off, image stabilization or vibration reduction turned off. I prefer shooting raw because it gives me additional options and control in post processing.

The list of equipment and software used is long.

• Camera gear

- Sturdy tripod
- DSLR with high ISO capability
- Fast wide glass, e.g., 14mm F2.8, 16-35mm F2.8, 35mm F1.4.
- Cable release/intervalometer/timer - e.g., Canon TC-80N3, in case I decide I want to make extra long (more than 30 seconds) exposures of the foreground to blend later

- Camera level—my Canon 5D Mark III has a built-in viewfinder level feature, which can be assigned to the multi-function button— indispensable when working in the dark
- Compass or hand-held GPS like Garmin
- Headlamp, even better with a red-light setting, but to be used as little as possible since it spoils my night vision for locating stars in the sky
- Small flashlight with diffuser and warming filter gels for optional light-painting on the foreground

► Pre-planning

- The Photographer’s Ephemeris (TPE) on I-Pad for a boatload of information - times and direction of sunrise, sundown, moonrise, moon down, location coordinates
- Skygazer v.4.5 for Mac and Windows to find the direction and timing of the Milky Way (or anything else, for that matter) in my target area, in a projected timeframe.
- Star Walk for mobile devices like I-Phones and iPads is another star-gazing app which shows a real-time view of the night sky and lots of information about the elements.
- The Milky Way for me in the Northern latitudes will be best during spring and summer, when that wonderful “Galactic Core” area around Scorpius and Sagittarius is visible to the south. This moves from the southeast to southwest, and rises earlier and earlier until by October it’s not really visible.
- In the winter months, I’ll just settle for star trails. If I want a circle of star trails, I look for North.
- I recently reviewed some dark-sky finders <https://medium.com/starts-with-a-bang/b77f63fe733b> for new ideas—dark seems pretty obvious—I have to get away from the Southern California megalopolis I live in and drive at least two or three hours for my dark sky adventure.

► Post-processing

- Lightroom® is my choice for review, editing and final output.
- I may use Photoshop® to remove airplane lights on individual images or to blend multiple images.
- There are some free apps (donations are accepted) for simple stacking of images into star trails: startrails.exe for Windows <http://www.startrails.de/html/software.html>, StarStaX for Windows and Mac www.markus-enzweiler.de/software/software.html; or Adobe Photoshop can be used to load as layers.



Ballarat Car

- An inexpensive app called Starspikes <http://www.prodigitalsoftware.com/StarSpikesPro3.html> is a Photoshop plug-in I occasionally use to add the effect of a star filter on, for instance, just a few stars.
- I also use LRTimelapse <http://lrtimelapse.com/> in conjunction with Lightroom to generate images for time-lapse video.

Ashford Mill



Artist's Statement



Janis Maguire, FPSA, MPSA

Photography is therapeutic. Other things going on in my head are blocked out as I focus on visualizing and creating an image. When I am fully engaged in my photography, whether it be a striking landscape or a special encounter with perhaps a wild animal, it can evoke for me a very strong emotional response. To share a moment in an animal's life, or to experience something my naked eye is incapable of, such as that infinite night sky, a macro closeup of a flower, or a fleeting ray of light on a landscape, gives me a certain sense of spiritual renewal, bringing my world into balance and helping me gain perspective. Wonderment. Awe. Contentment. Intimacy. In some settings, a feeling of peace. In others, that I was able to see into the world a little more deeply and take the time to feel it and grow. That engagement might even expand as I enjoy a print I've made, lingering on all the experience and emotion I felt when I recorded the image. Occasionally, I find an image with a wow factor in my files I didn't realize I had, thus adding to or renewing that joy and wonderment.

I'm elated when I receive feedback from someone who sees my work and who also experiences that same joy, wonder, intimacy and amazement evoked by my image. ■



Bryce Sunset Point



Stovepipe Trails