



Great Leonid Meteor Storm of 2001, "Fireball in Orion," Historical, Richmond, RI, 4:11 a.m., Elitechrome 400 pushed to 1600.

ASTROPHOTOGRAPHY

The Earth and Sky Connection

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Astrophotography or "Night-sky photography" is what I love to do. Although I also shoot nature in general, "low-light photography" is my specialty. You may want to know why, and I would love to tell you. Night-sky photography is low-light imaging at its extreme. The astrophotographer is trying to capture or image subjects, most often astronomical in nature, that are billions of miles or even light-years away. It is very challenging to a camera's optics and for the person behind the camera, and I love a challenge! This specialized form of photography appeals to me because it allows me to use my skills and practice my art form outdoors and close to nature. I guess you could consider me to be an "outdoor" and "nature" photographer all in one. Often I find myself setting my alarm for early morning to catch an astronomical event like an eclipse of the

moon, meteor shower, or possible Aurora Borealis. When most sane people are sleeping in their warm, comfy beds, astrophotographers are often on a mission to capture that one "trophy" shot for their collection. "Early bird gets the worm" so to speak. Some of my photo shoots occur during late evening or the dark early morning hours under a star-studded inky black sky that is just incredible to behold and therefore makes night-sky photography humbling! Other times, I am out imaging during twilights at dawn and dusk when the sun is just about to rise/set or just after/before when the warm sun angles are creating beautiful changing scenes and a palette of colors across the landscape. Sunsets, sunrises, seascapes, landscapes, cloudscapes that often exhibit "nature" at its best happen during these hours. A lighthouse or bridge or maybe a church silhouetted or possibly highlighted



Great Aurora of 2004, November 8, 2004, 4:30 a.m., Richmond, RI



*Total Lunar
Eclipse,
May 15, 2003,
prime-focus,
Richmond, RI,
Elitechrome 400*

in golden warm light is captured with an astronomical subject, like the “morning and evening star,” otherwise known as our sister planet Venus. My ongoing theme in my artwork is to capture the earth and sky and to show that connection through a feeling or message in my compositions. The sounds of nature—birds chirping, ocean waves that are only ripples against the shore, the sound of a fog horn, or seagulls feeding—allows me to get close to nature, respect it, and be thankful for the planet on which we live. The serenity and solitude I get from my photo endeavors are both calming and healthy to my mind and spirit and fuels my passion for this art form.

So now that I have captured your interest, you ask how it is done. How does one go about imaging in such low-light conditions? Let me tell you. Basically, all you need is a fully mechanical, fully manual 35mm SLR, a cable release, and a steady tripod. That’s it! The mechanical shutter and the ability to manually select your camera aperture and shutter are vital since most of the time astroimagers are photographing using exposure times from several seconds to even hours! Night-sky photography is an all-season endeavor with imaging often done during the winter months when night skies are at their clearest and steadiest. The mechanical shutter allows an astrophotographer to expose his or her film for as long as needed since there are no batteries that may be depleted by the cold



Venus & Steeple Conjunction, May 17, 1999, Richmond, RI, Elitechrome 100



Sunset at Salty Brine State Beach, Galilee, RI, June 17, 2003, Elitechrome 200

Photos © Ronald A. Zincone



Newport Bridge Sunset, Battery Park, July 6, 2003, Newport, RI, Elitechrome 200

temperatures. The manual mode of a SLR will give the photographer the crucial setting of “B” or bulb so that one can lock the shutter open indefinitely. The cable release is your friend here. It allows the photographer to lock open the shutter without causing additional vibrations which may blur your image. With the combination of a cable release and steady tripod, successful long exposures become reality. In addition to the equipment, being a successful night-sky photographer also involves some sacrifice, diligence, patience,

and most importantly, practice! Be prepared to burn a lot of film; take good detailed notes; and with lots of practice in the field, the learning curve grows easier. For me, night-sky imaging allows me to see nature in a grander view while calming my soul and at the same time archiving and preserving the night sky through my images. I am fortunate to live in a dark-sky location away from city lights, and therefore, I do not take it for granted. Dark skies allow me to image better and to see with my own eyes the celestial wonders above us. 🌌



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*Total Lunar Eclipse
“Red Sox” Moon
Trail, October 27,
2004, Richmone, RI
Velvia 50*

