Nature Photography IV - The Last One

Night and After the Camera
“When words become unclear, I shall focus with photographs. When images become inadequate, I shall be content with silence.”

~Ansel Adams
Basics of the Aurora

• Coronal Mass Ejection - Particles from the sun are launched into space through a solar flare

• Arriving at Earth, charged particles are drawn North and South by the magnetic field

• Entering the atmosphere, the particles light up (literally) like a neon-sign.
Locations and Cycles

• Far North or Far South: The two are mirror images of one another.

• 11 Year Cycle (Peaked 2012-2014)

• Solar Activity peaks around Spring and Fall Equinox
Gear for Night and Aurora Photography

- Good low-light camera
- Fast, wide-angle lens
- Tripod - (No escaping this one)
- Plastic bags or a dry bag
- Clear skies
And Lots of Warm Clothes
On Lenses

• Wide
• Fast (f2.8 or faster is ideal)
• Manual Focus set to infinity line
• Refine the Focus
• Tape focus in place!
Exposure

• Shoot Wide Open
• High ISO
• 1-10 sec shutter speed (faster = better)
• (Turn down the brightness on your camera’s screen)
Slow Shutter

20 Seconds
Fast(er) Shutter

5 seconds
As Fast As Possible Shutter Speed

2 seconds
Composition

• Experiment with both vertical and horizontal images

• Watch out for distractions

• Foregrounds Matter

• Night and Aurora Photography are just another form of landscape - Think of them this way
Whoops
Moonlight
Moonless
Other Night Photography Situations

- Longer exposures 10-30 secs or more.
- More than 20 seconds or so will lead to star trails.
- Milky way shots require fast lenses and moderate exposures.
- Long exposures and high ISOs lead to digital noise (false stars).
It’s Always Sunny on the Moon

Expose for sunlight to capture details in the moon
“There are no rules for good photographs, there are only good photographs.”

— Ansel Adams
Post-Processing
Note on File Types

• Jpeg (.jpg) - Compressed file type, with variable quality
  • If you don’t want to process, shoot in jpeg.

• TIFF (.tif) - Uncompressed file type, high quality.

• RAW (.cr2, .dng, .raw, others)- the “digital negative” recorded exactly as the camera’s sensor saw the scene.
  • Flat looking right out of the camera
  • Best option for post-processing
  • Requires work
Intro to Adobe Lightroom