

Night Sky Photo Subjects

Milky Way

Our galaxy contains more than 100 billion stars. We are about halfway from its center to its edge and can see only part of the galaxy - a glowing band that we call the Milky Way. [See this article with a calendar](#) to learn the best dates to photograph it.

Northern Lights - Aurora Borealis

These natural light displays are caused by solar wind interacting with Earth's magnetic field and atmosphere. Excited oxygen and nitrogen gases create vibrant, shifting colors. The [NOAA website](#) and the [Aurora Alerts app](#) help you know when and where to look.

Star Trails

Long-exposure photos capture the shifting positions of stars as streaks, arcs, or concentric circles. This is caused by the Earth's rotation, not the movement of stars. Special photo techniques and apps can overlay multiple images. [Here's an article](#).

Time Lapse Video

With time-lapse, you make a video out of still photos taken at set intervals. A time-lapse video of the night sky can show the effects of Earth's rotation in surprising ways. You can create a video like this with patience and modest equipment. [Some examples](#).

Meteor Shower - Shooting Stars

Earth often moves through streams of debris from comets or asteroids. Particles ignite as they hit the atmosphere, creating bright streaks of light. [This website](#) tells you when to look, but you won't get an exact time, so you take a lot of shots and hope for a meteor.

Moon

A telephoto lens will get you closer to the moon than the naked eye, and an image editor can adjust your photo's brightness. Try shooting at twilight or dawn. Note that as the Moon rises over the horizon it tends to appear larger. Here's a nice [guide from NASA](#).

Nightscape

Nightscape photos combine the night sky and an earthly setting. Elements on the Earth may be nearby in the foreground or far away. Here are some examples:

- Leaves, a lone tree, or a forest
- A lake or river, perhaps with a reflection in the water
- A lit home or a dark abandoned building
- A lighthouse, bridge, or fountain
- A monument or a city skyline
- Fireworks or streaking vehicle lights

The earthly part of the photo is often shot when natural light is available and later edited onto a photo taken at night. This requires some patience, planning, and expertise.