

## Annular Eclipse Coming this Fall

As we prepare for the Great North American Eclipse on April 8, 2024, we mustn't forget that Perry County, including 49 continental U.S. states will experience at least a partial eclipse, as will most of Canada and all countries in Central and South America this year, on Saturday, October 14, 2023. This celestial event will give eclipse chasers the opportunity to witness the Ring of Fire for those within its path. Starting in Oregon midmorning at 9:03 am Pacific Time and exiting out Texas by 12:03 pm Central Time. To be within its 125-mile-wide path you must travel to Oregon, Nevada, Utah, Arizona, New Mexico, or Texas. But don't be discouraged if you can't travel as many in the U.S. will not. Although, Annular Solar Eclipses are exciting they do not have the "WOW" factor that a Total Solar Eclipse has sparking worldwide travel.

The inner black circle, the umbra, is where the Moon appears completely within the Sun's disk. The outer shadow circle, the penumbra, shows a partial eclipse. The partial eclipse will be slight near the outer circle, meaning less percentage viewed and deep near the path of annularity will see a larger percentage. In a deep partial eclipse, the sky will cool, and sunlight will take on an eerie quality. During an annular solar eclipse, the apparent size of the Moon's disk is slightly smaller than the apparent size of the Sun's disk. Therefore, only the outer edge of the Sun remains visible, and the Sun appears as a brilliant ring if you are inside the path. This is where it gets its name "Ring of Fire." Perry County, Missouri will have a 50% to 60% partial for the Annular Solar Eclipse for your viewing pleasure. Meaning, you will not be able to see the Ring of Fire, but you will be able to see with your eclipse glasses as the moon covers nearly 60% of the sun which if you enjoy astronomy should be on your bucket list.

Much different than we experienced during the Total Solar eclipse in 2017, during the Annular Solar eclipse the moon will not block out as much of the sun's powerful rays as it does in a Total solar eclipse meaning you will need to wear your solar glasses throughout the entire event. There is no time when it is safe to look directly at the sun. If you cared for your 2017 eclipse glasses and have no scratches, tears, or holes then you can use them. Otherwise, you can find certified solar glasses at the Perry County Heritage Tourism office and welcome center. Should you go elsewhere make sure they meet the ISO certified safety requirements by the American Astronomical Society.

Not to be confused with a Lunar Eclipse, the last Annular Solar Eclipse to come across the United States happened in 2012. The October 14, 2023, Annular Solar Eclipse is being considered a warm-up for eclipse chasers and a test-run for Astro photographers with only 177 days until the next total solar eclipse on April 8, 2024. So, grab your glasses and be ready!