

Observing the Moon

The moon is one of the most unique objects that our solar system offers both from scientific as well as an observational point of view. Our solar system sports well over 40 moons but our moon is the only planet other than Pluto (is Pluto really a planet?) that is relatively close in size. This simple fact is a very important factor in maintaining an inhabitable place for life here on earth. If it differed in size, it's gravitational pull would either be perhaps too harsh on the ocean, atmosphere and would introduce severe climatic instabilities.

Our earth's lone satellite too often gets a bum rap from amateur astronomers. I know I often used to curse it and not even go out to observe when it got close to being full. Instead of cursing a lost opportunity to observe deep sky objects, we could and should embrace the opportunity to explore the awe-inspiring features Luna has to offer.

What is a Mare?

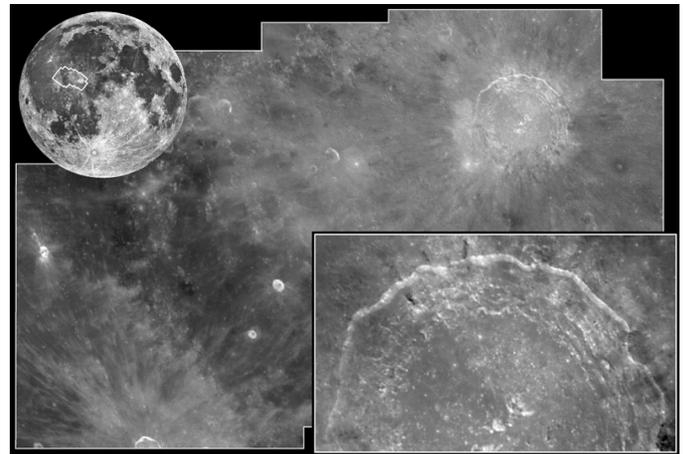
Mare is the Latin word for sea. You can spot a Mare by finding the darker and often largest features that the moon offers. The Maria (plural) were created early in the moon's life when giant meteorites collided with it. Later, the craters were filled with dark lava when the moon was still volcanically active. There are some exceptionally detailed craters in these seas to look at.

What are Rays?

Rays on the moon are created by crushed rock sprayed out from an impact of a meteor. They form streaks that look like the top of a peeled orange. See picture of Crater Copernicus.

What is a Highland?

Highlands are areas on the moon that are heavily cratered and are often very bright. Highlands offer the most interesting observing with many mountains and shadows.



Crater Copernicus • The Moon HST • WFPC2
PRC99-14 • STScI OPO • J. Caldwell (York University), A. Storrs (STScI) and NASA

Summary

If you have never set out to explore the moon through your telescope or binoculars, you are missing out on some thrills. During the waning or waxing periods, the dark/light border offers magnificent views in high power. If you have ever offered a view of the moon to the uneducated public, you know how fulfilling seeing lunar features can be. We can share and explore the many wonders the moon has to offer. So the next time the moon is "in the way" of your deep sky observing, take some time to explore and identify features you haven't seen before. You won't be disappointed. If you have a camera and a tripod you can get great shots of craters and mares by setting the camera up to look through the eyepiece.

Try it sometime and 'see' what you've been missing!

- Andy Weeks

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We would love for you to submit articles for the newsletter. The ongoing "Constellation Mythology" segment is open for anyone. Please contact Andy Weeks or Ken Schmidt at info@fvastro.org

Diameter	2160 Miles
Time to Orbit Earth	27.3 Days
Distance from Earth	238,850 Miles
Distance from Earth	238,850 Miles
Surface Gravity	0.17 of Earth's
Leaving?	Spirals away 1 ½ inches per year

Exploring the Night Sky wonders from Fox Valley, Illinois