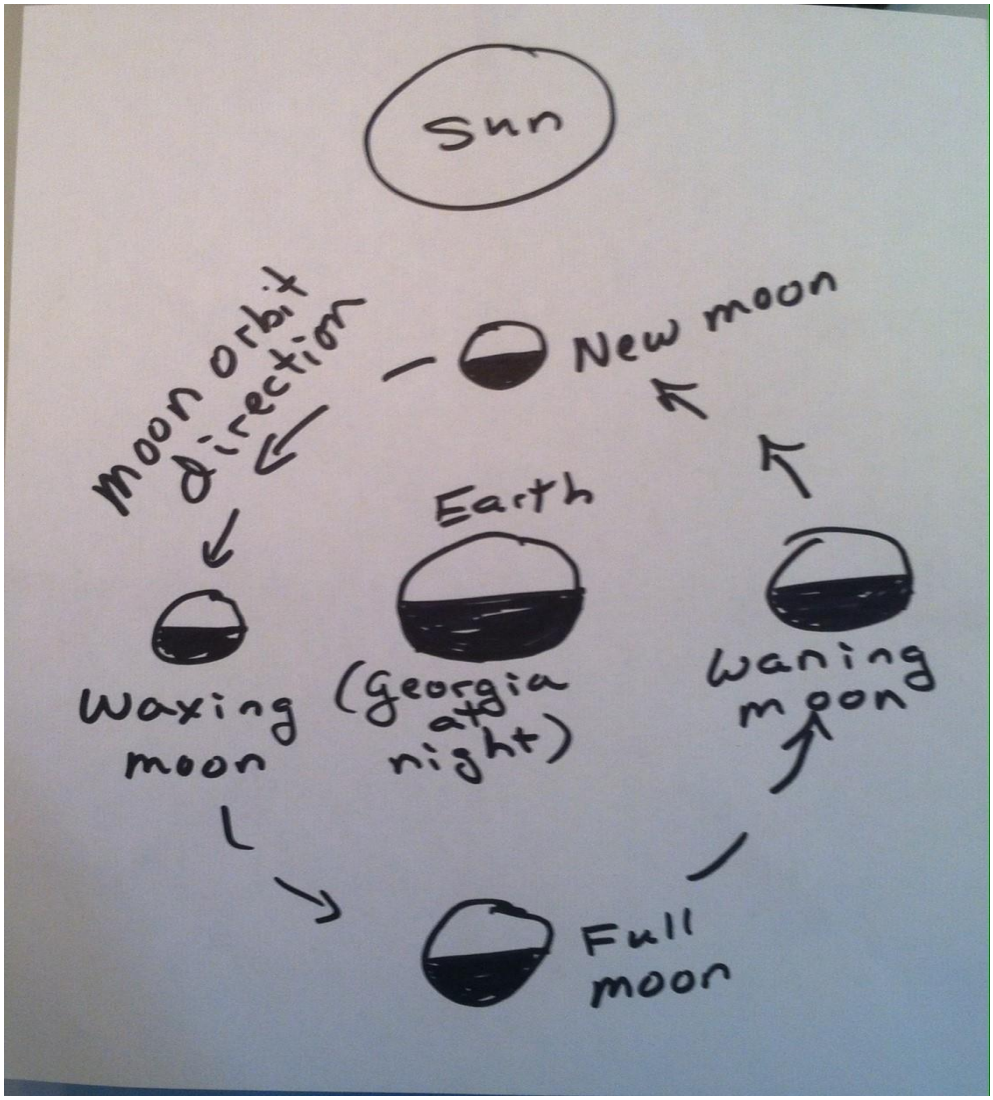
Crescent Moon – A Handy Night-time Compass

The Moon takes approximately 28 days to orbit the Earth (1 lunar month). See my figure below (not drawn to scale).

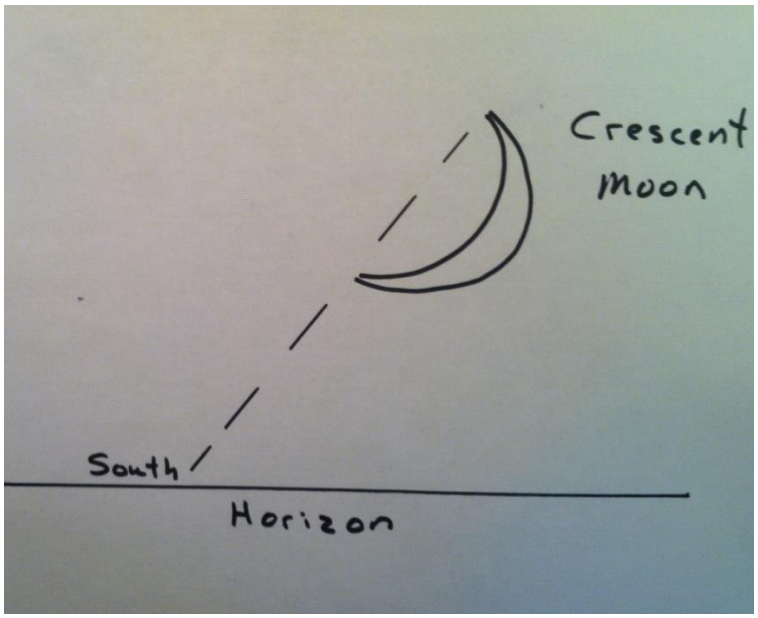
During the first and last weeks of each lunar month, it is easy to see a "crescent moon" on nights when we have a cloudless sky. When viewed by a person standing on Earth, the shiny side always points towards the Sun. When the right side is shiny, the Moon is early in the lunar month (a "waxing" moon). Soon it will become a full moon. When the left side of the crescent is shiny, the Moon is "waning." We cannot see a "new Moon" because the shiny side is facing away from Earth.



Whenever we see a crescent Moon during the waxing or waning periods of the lunar month, we can use it as a compass. Here's how: in your mind draw an imaginary line connecting the two tips of the crescent and extend the line down to the horizon on Earth. The point where the line touches the horizon will be approximately south. Once we know which way is south, we can easily figure out which ways are north, west, and east. See the second figure shown below.

NOTE: This method works best when the crescent Moon appears high in the sky. When the crescent Moon is closer to the horizon, it is not as accurate.

Go outside with your family and check how accurate the "crescent Moon compass" is compared with your smartphone's or a hand-held compass. Try comparing the "crescent Moon compass" with a good "tree compass" in your yard or neighborhood (see Backyard Bushcraft issue #3). To learn more about the Moon, download a moon-phase app for your smartphone or read about it on the web.



To learn more outdoor navigation skills, see this book (or other books by the same author):

Gooley, Tristan (2014) The Lost Art of Reading Nature's Signs. New York: The Experiment Publishing Company.