

# Monthly Notices of the Everglades Astronomical Society



Naples, FL October 2012

Officers: President: Michael Usher; VP/Secretary Todd Strackbein; Treasurer: Bob Gurnitz

Newsletter Editor Jackie Richards (<u>jmrichards2005@yahoo.com</u>)

(Newsletter publisher address 580 24th Ave. NE, Naples, FL 34120)

Home Page: <a href="http://gator.naples.net/clubs/eas">http://gator.naples.net/clubs/eas</a> Webmaster: Martin Zombeck (<a href="mvz@alum.mit.edu">mvz@alum.mit.edu</a>)
Fack Coordinator & information on viewing Charlie Paul <a href="mailto:cpaul651@earthlink.net">cpaul651@earthlink.net</a> 410-8192

# President's Message

I hope October finds everyone well. We have a very special speaker for our next meeting, Carolina Pena, who spent five weeks in New Mexico at the Summer Science Program - be sure to come see her!

We have two viewing events with local schools this season, one in November and one in January. I'll let you know the exact dates when we get everything finalized, but we will need extra telescopes from club members.

Now that October is here things are a bit drier and the skies are a bit clearer at the Fack. October is the traditional month when I show up there after taking the summer off. I look forward to seeing you there, too!

Clear Skies, President Mike Usher

# Dates for the "Fack"

Usually the best times to go out to the Fakahatchee Strand viewing site are moonless nights. Below is a list of upcoming Saturday nights that you will often find fellow club members out there enjoying the skies with you (weather permitting).

Date	Moonrise	Moonset
Oct. 8	12:37AM	
Oct. 15		7:04PM

# **Sky Events**

Oct. 8 - Last Quarter Oct. 15 - New Moon

Oct. 22 - First Quarter

Oct. 29 - Full Moon

# **Next Meeting**

Oct. 9, 2012 Time 7:00 – 9 pm At the Norris Center, Cambridge Park



# Just bring your eyes



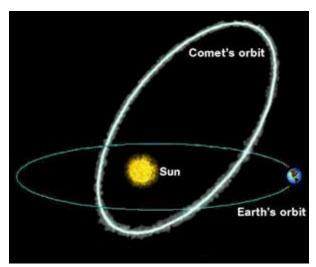
If it's time for a meteor shower, you won't need a telescope, binoculars, or a high mountain to have a "star gazing" party. You might need a warm sleeping bag and an alarm clock to wake you in the middle of the night. But then just lying down in your own back yard will put you in the perfect spot to enjoy a great show.

# What is a meteor shower?

A meteor is a space rock—or meteoroid—that enters Earth's atmosphere. As the space rock falls toward Earth, the resistance—or drag—of the air on the rock makes it extremely hot. What we see is a "shooting star." That bright streak is not

actually the rock, but rather the glowing hot air as the hot rock zips through the atmosphere.

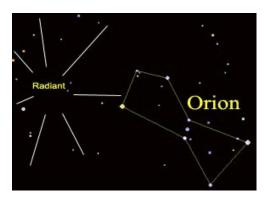
When Earth encounters many meteoroids at once, we call it a meteor shower.



Why would Earth encounter many meteoroids at once? Well, comets, like Earth and the other planets, also orbit the Sun. Unlike the nearly circular orbits of the planets, the orbits of comets are usually quite lop-sided. As a comet gets closer to the Sun, some of its icy surface boils off, releasing lots of particles of dust and rock. This comet debris gets strewn out along the comet's path, especially in the inner solar system (where we live) as the Sun's heat boils off more and more ice and debris. Then, several times each year as Earth makes its journey around the Sun, its orbit crosses the orbit of a comet, which means Earth smacks into a bunch of comet debris.

# But not to worry!

The meteoroids are usually small—from dust particle to boulder size—. They are almost always small enough to quickly burn up in our atmosphere, so there's little chance any of them will strike Earth's surface. But there is a good chance that you can see a beautiful shooting star show in the middle of the night!



In the case of a meteor shower, the glowing streaks may appear anywhere in the sky, but their "tails" all seem to point back to the same spot in the sky. That's because all the meteors are coming at us at the same angle, and as they get

closer to Earth the effect of perspective makes them seem to get farther apart. It's like standing in the middle of railroad tracks and seeing how the two tracks come together in the distance.

Meteor showers are named for the constellation where the meteors appear to be coming from. So, for example, the Orionids Meteor Shower, which occurs around October 21 each year, appear to be originating near the constellation Orion the Hunter.

### Plan ahead

Here are dates of major meteor showers. Peak viewing times will vary by a day or two each year. Keep in mind: If the Moon is full or near full, you may not see many meteors. Some years are better than others for numbers of meteors per hour.

Quadratids January 3/4
Lyrids April 21/22
Perseids August 12/13
Orionids October 21/22
Leonids November 17/18
Geminids December 13/14

