

Mountaineer Skies

Volume 7, Issue 2

<http://www.as.wvu.edu/~planet/index.html>

April – June, 2007

From the Editor's Desk

If you are confused about the changes in **Daylight Saving Time**, you are not alone. For more information go to

<http://www.daylight-saving-time.com/>

The annual **Lyrids Meteor Shower** takes place between April 16 and 25. The best time for viewing is early on the morning of Sunday, April 22 and Monday, April 23. Maximums of between 10 – 20 per hour are expected.

The **Summer Solstice** or first day of Summer occurs on June 21 this year. This is the day when the Sun is highest in the sky at noon. Summer is followed by the Autumnal Equinox or the first day of autumn on September 23 and the Winter Solstice or the first day of winter on December 22.

If you have any photographs that you took of Stonehenge, please send them to me, and I will include them in the next issue of *Mountaineer Skies* with attribution.

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In The Sky This Month

Visible Planets in the Night Sky

Beginning of April, 2007

	Const	Rise	Transit	Set	Mag
Sun		07:03	13:24	19:44	-26.8
Mercury	Aqr	06:16	11:55	17:32	0.0
Venus	Ari	08:35	15:41	22:48	-4.0
Mars	Cap	05:20	10:37	15:53	1.1
Jupiter	Oph	01:11	05:54	10:37	-2.3
Saturn	Leo	15:06	22:05	05:04	1.6

Beginning of May, 2007

	Const	Rise	Transit	Set	Mag
Sun		06:20	13:17	20:13	-26.8
Mercury	Ari	06:20	13:11	20:04	-2.1
Venus	Tau	08:34	16:10	23:48	-4.1
Mars	Aqr	04:20	10:05	15:51	1.0
Jupiter	Oph	23:08	03:52	08:35	-2.5
Saturn	Leo	13:07	20:06	03:05	1.7

Beginning of June, 2007

	Const	Rise	Transit	Set	Mag
Sun		05:54	13:18	20:41	-26.8
Mercury	Gem	07:25	14:59	22:34	0.5
Venus	Gem	09:08	16:35	00:02	-4.3
Mars	Psc	03:14	09:29	15:46	0.8
Jupiter	Oph	20:51	01:35	06:20	-2.6
Saturn	Leo	11:09	18:10	01:07	1.8

Leo	Leo, The Lion
Gem	Gemini, The Twins
Tau	Taurus, The Bull
Aqr	Aquarius, The Water Bearer
Ari	Aries, The Ram
Oph	Ophiuchus, The Serpent Holder
Psc	Pisces, The Fishes
Cap	Capricornus, The Goat

About: Finding Saturn in the Sky

On a clear evening looking up at the sky you can see thousands and thousands of stars, some blue, some white, some dim, and some bright. The planets are also there to see with the unaided eye — Mercury, Venus, Mars, Jupiter, and Saturn. But which is which? They both seem to look the same. A long time ago, when people were more familiar with the night sky than we are, because they lacked the electric glow box we call television, they noticed that a few of the celestial objects moved slowly back and forth relative to the stellar background. It takes a lot of skywatching to notice a thing like this. The Romans called these moving bodies *planeta* or **wanderers** as they appeared to wander back and forth across the night sky. From *planeta* comes, of course, our word **planet**, and that is what they were seeing. With a pair of binoculars, perhaps affixed to a tripod, or with a telescope, you can see that the stars remain a pinpoint, regardless of how much they are magnified, but the planets become disks under intensification.

For our example we are going to look for Saturn on the evening of **April 15, 2007, at 9:00 P.M.** We chose Saturn because of its distinctive ring system making it fairly easy to verify even with modest sized binoculars. By the way, once you have found Saturn on the 15th, you should be able to find it at least into July, always moving westerly. Other planets will also be visible. If you look low on the southern sky at the beginning of August, you should find Jupiter

Steps in finding Saturn on April 15, 2007, at 9:00 P.M. (21:00)

1. The first step is to get on the Internet and go to this web site.

<http://www.as.wvu.edu/~planet/chart.htm>

Then click on the rather long web address. This will take you to the **Heavens -Above Sky Chart**.

The reason that the web address is so long is that you need to tell the program where on the Earth you are located and what your time zone is. In our case $\text{lat}(\text{latitude}) = 39.628^\circ$ & $\text{lng}(\text{longitude}) = 79.956^\circ$, and $\text{TZ}(\text{Time Zone}) = \text{EST}$.

You should now see **Sky Chart** in the upper left side of the screen and below it a sky chart with a black background. When you get to this point, save the web address as a **Favorite** so that you will not have to go to the chart web site each time you want to access this site.

2. At the bottom of page you will find **Date/Time (Local Time)**, below which contains the parameters **Year:**, **Month:**, **Day:**, **Hour:**, and **Minute:**, each having a small + and – button. You should see the current **Year, Month, Day, Hour, and Minute** displayed. As we want to see what the night of April 15, 2007, at 9:00 P.M. (21:00) looks like, we will have to change the parameters. The **Year** should not need to be changed unless your computer clock is way off. If the **Month** says 3 (March), then press the + button once, advancing it to 4 (April). Using the + button, advance the **Day** to 15. **Hours** should be set to **21** (9:00 P.M.) and **Minutes** to **00(zero)**. Finally click on the **Submit** button to accept your changes.

3. Take a look at the **Sky Chart** now. You should see Saturn on an imaginary line that runs from North at the top to South at the bottom. The planet is the bright object about 60° or so above the Southern horizon. You can estimate this by realizing that the horizon is 0° and directly overhead is 90° (zenith), so Saturn should be about two-thirds of the way up from the southern horizon toward the Zenith.

4. Now take your compass outside, find **South** and identify **Saturn**. Use your binoculars or telescope to verify that you have found the ringed planet. After finding Saturn, you might try **Venus** which is located near the western horizon and is very bright. It may take a little practice.

2007 Planetarium Shows



April 13 & 27, 2007 <i>Sky Quest</i>	May 11 & 25, 2007 <i>Sky Quest</i>	June 8, 2007 <i>Sky Quest</i>
	July Closed	

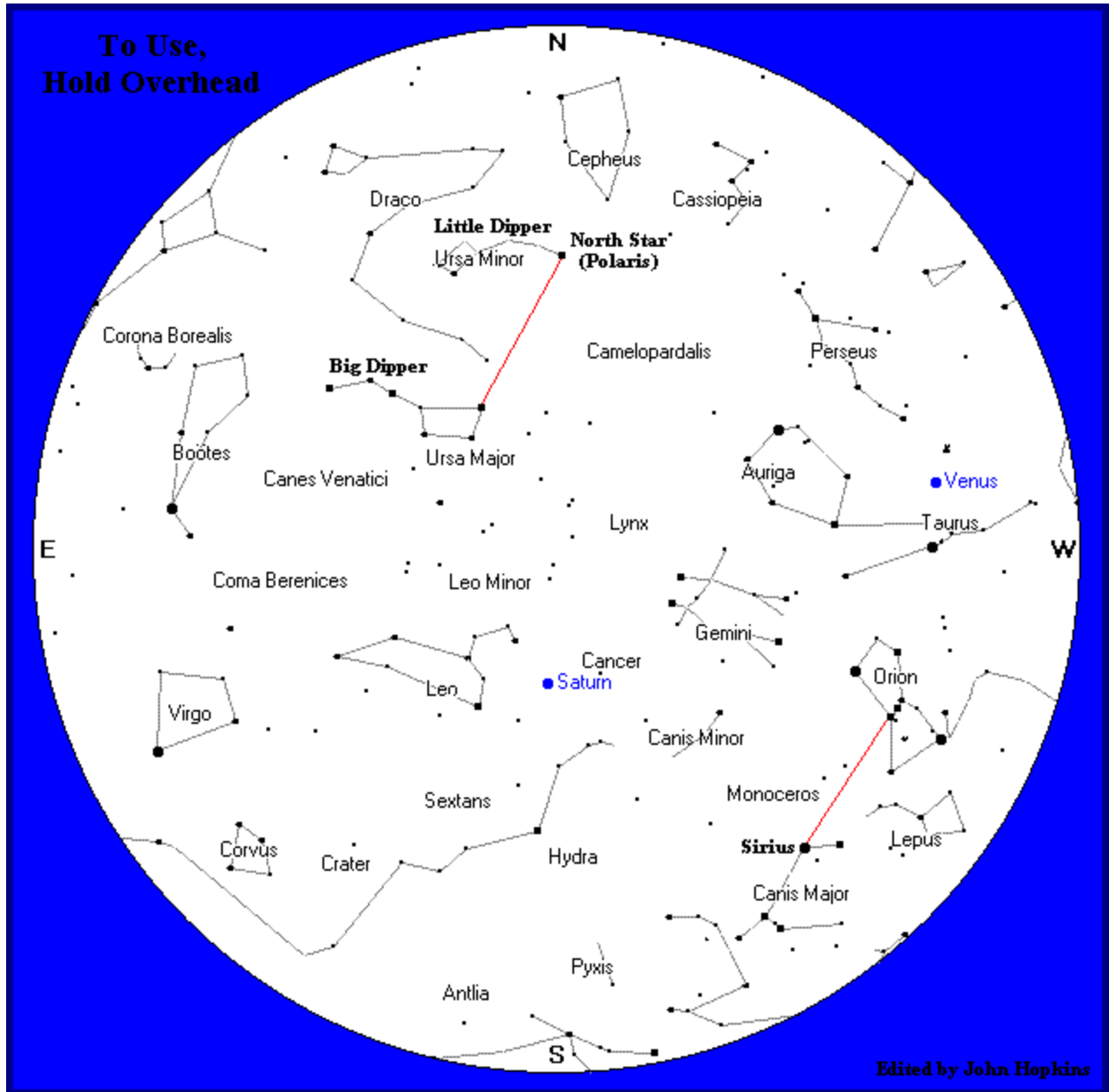
For those who are interested in bringing a group, such as schools or scouts, during the day, please call for more information. These shows are usually given on Tuesday or Thursday mornings.

For further information or reservations, please call John Hopkins at (304)293-3422, extension 1443 or by email at: jhopkins@mail.wvu.edu

Selected Sunrise/Sunset and Moon Rise/Moon Set Times

Date	Sunrise	Sunset	Moon Rise	Moon Set	Moon Phase
April 2	7:03 A.M.	7:43 P.M.	8:00 P.M.	6:50 A.M.	Full Moon
April 10	6:50 A.M.	7:51 P.M.	2:53 A.M.	11:54 A.M.	Last Qtr
April 17	6:40 A.M.	7:58 P.M.	6:27 A.M.	8:42 P.M.	New Moon
April 24	6:30 A.M.	8:05 P.M.	12:47 P.M.	3:00 A.M.	First Qtr
May 2	6:20 A.M.	8:13 P.M.	8:56 P.M.	6:02 A.M.	Full Moon
May 9	6:12 A.M.	8:20 P.M.	2:09 A.M.	12:03 P.M.	Last Qtr
May 16	6:05 A.M.	8:26 P.M.	5:30 A.M.	8:53 P.M.	New Moon
May 23	5:59 A.M.	8:33 P.M.	12:46 P.M.	1:58 A.M.	First Qtr
May 30	5:54 A.M.	8:39 P.M.	8:53 P.M.	5:07 A.M.	Full Moon
June 8	5:52 A.M.	8:44 P.M.	1:35 A.M.	1:26 P.M.	Last Qtr
June 14	5:51 A.M.	8:47 P.M.	4:52 A.M.	8:57 P.M.	New Moon
June 22	5:52 A.M.	8:50 P.M.	1:36 P.M.	1:05 A.M.	First Qtr
June 30	5:54 A.M.	8:51 P.M.	9:30 P.M.	5:30 A.M.	Full Moon

April 2007 Sky Chart* for:
 10:00 P.M at the beginning of the month
 9:00 P.M in the middle of the month
 8:00 P.M at the end of the month



*Sky Chart used with the kind permission of [Heavens-Above](http://www.heavens-above.com/) at <http://www.heavens-above.com/>

The TOMCHIN PLANETARIUM is named in honor of the late Harold Tomchin, of Princeton, W.Va., who made a generous donation to ensure its continuing operation, and whose family continues to support the planetarium for the educational benefit of WVU students, staff, and faculty members, as well as the local community. Contributions can be made in support of the planetarium through the WVU Planetarium Project at the WVU Foundation, Inc., phone (304)284-4000. Thank You.



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