

Mountaineer Skies

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

January 2003

From the Editor's Desk

We hope you had a safe and enjoyable holiday. Also hoped is that you were able to see and enjoy the **Leonids** in November and the spectacular **Geminids** in December. January brings another, the **Quadrantids**.

The meteor shower called the **Quadrantids** appears to come out of the constellation **Boötes, the Herdsman**. Although it is visible from about December 7 through January 8, the maximum should occur about 2:30 A.M. on the morning of January 4. Look toward the East.

This month we have another excellent article by Bruce McClure about Saturn and the Crab nebula. I am sure you will enjoy it as much as I did.

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In The Sky This Month

Visible Planets in the Night Sky

Beginning of January, 2003

	Const	Rise	Transit	Set	Mag
Sun		7:37	12:23	17:10	- 26.8
Mercury	Sgr	8:39	13:38	18:32	0.3
Venus	Lib	3:54	9:07	14:21	- 4.5
Mars	Lib	3:39	8:46	13:55	1.5
Jupiter	Cnc	19:49	2:52	9:54	- 2.5
Saturn	Tau	15:46	23:10	6:34	1.9

Middle of January, 2003

	Const	Rise	Transit	Set	Mag
Sun		7:35	12:29	17:23	- 26.8
Venus	Oph	4:07	9:10	14:13	- 4.4
Mars	Lib	3:29	8:28	13:28	1.4
Jupiter	Cnc	18:47	1:51	8:55	- 2.6
Saturn	Tau	14:47	22:11	5:35	2.1

End of January, 2003

	Const	Rise	Transit	Set	Mag
Sun		7:24	12:33	17:42	- 26.8
Mercury	Sgr	5:56	10:48	15:40	0.0
Venus	Sgr	4:26	9:20	14:14	- 4.3
Mars	Oph	3:17	8:08	13:00	1.3
Jupiter	Cnc	17:33	00:40	7:46	- 2.6
Saturn	Tau	13:40	21:04	4:28	2.2

Oph	Ophiuchus, The The Serpent Holder
Lib	Libra, The Scales
Sgr	Sagittarius, The Archer
Tau	Taurus, The Bull
Cnc	Cancer, The Crab

About: Saturn & the Crab Nebula

At nightfall, the brilliant planet Saturn shines golden in the eastern sky, with a steadier light than the twinkling stars. It reigns supreme as the evening "star," until two brighter luminaries enter the scene a few hours later. The star Sirius and the planet Jupiter light up the eastern horizon by mid evening; but nonetheless, you can distinguish Saturn by its much loftier position in the heavens.

All month, Saturn resides in the constellation Taurus, between the two modestly bright stars depicting the tips of the bull's horns. At evening look for El Nath - the brighter of these two stars - to the planet's upper left, and for Zeta Tauri to Saturn's immediate lower right.

Not too surprisingly, perhaps, a hot spot looms amidst the horns of Taurus, the bull. In between these horn stars you can locate the famous Crab Nebula, a supernova remnant of a once mighty star that blew itself to smithereens on July 4, 1054. Historic records indicate that this fiery display shone in the broad daylight for over three weeks. The Crab Nebula - now but a shell of the star's former self - lingers as a cloud of stellar debris, too dim to see without a telescope.

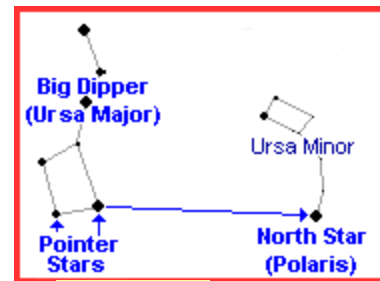
Saturn occults - or passes in front of - the Crab Nebula on the evening of January 4. Afterwards, Saturn slowly drifts westward (left to right) through Taurus, staying within the vicinity of the Crab throughout the month. But don't expect easy telescopic viewing of the Crab Nebula right now, for the ringed planet outshines it by some two thousand times.

Saturn, unlike the Crab, is particularly telescope-friendly in January. Close to Earth, bright, and tilted just right to show off its rings, this jewel of a planet adds splendor to the starry sky.

Bruce McClure

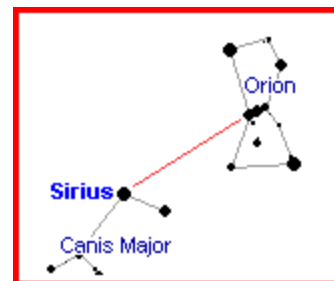
The North Star, the brightest star in the sky?

The **North Star**, also known as **Polaris**, is probably the most well-known of stars. It is usually thought of as the star that points north and also as the brightest star in the sky. Are these so?



To find the **North Star**, begin by finding the **Big Dipper (Ursa Major)**. This is easy to do as all seven stars of the dipper are nice and bright. Once you have found this constellation, find the two stars in the side of the bowl which we will call "**pointer stars**" because they point the way to the **North Star**. Draw an imaginary line as shown in the above diagram until you come to the North Star. It does always point north, but as you can see, it is not a particularly bright star. In fact it is really only the 49th brightest star in our sky.

Sirius in **Canis Major** (the Big Dog) is the brightest star in the sky and is very easy to find. Simply find the three stars in Orion's belt and follow them down until you find **Sirius**.



If you are having trouble finding either the **North Star** or **Sirius**, use the sky chart on page four. With a little practice, you can always find true north. Please note that this is not the same as magnetic north.

2003 Planetarium Shows



MARSQUEST

Narrated by Patrick Stewart

http://www.as.wvu.edu/~planet/mars_quest.htm

January 10 & 24, 2003 <i>MarsQuest</i>	February 14 & 28, 2003 <i>MarsQuest</i>	March 14 & 28, 2003 <i>MarsQuest</i>
April 11 & 25, 2003 <i>MarsQuest</i>	May 9 & 23, 2003 <i>MarsQuest</i>	June 13, 2003 <i>MarsQuest</i>
	July, 2003 Closed	

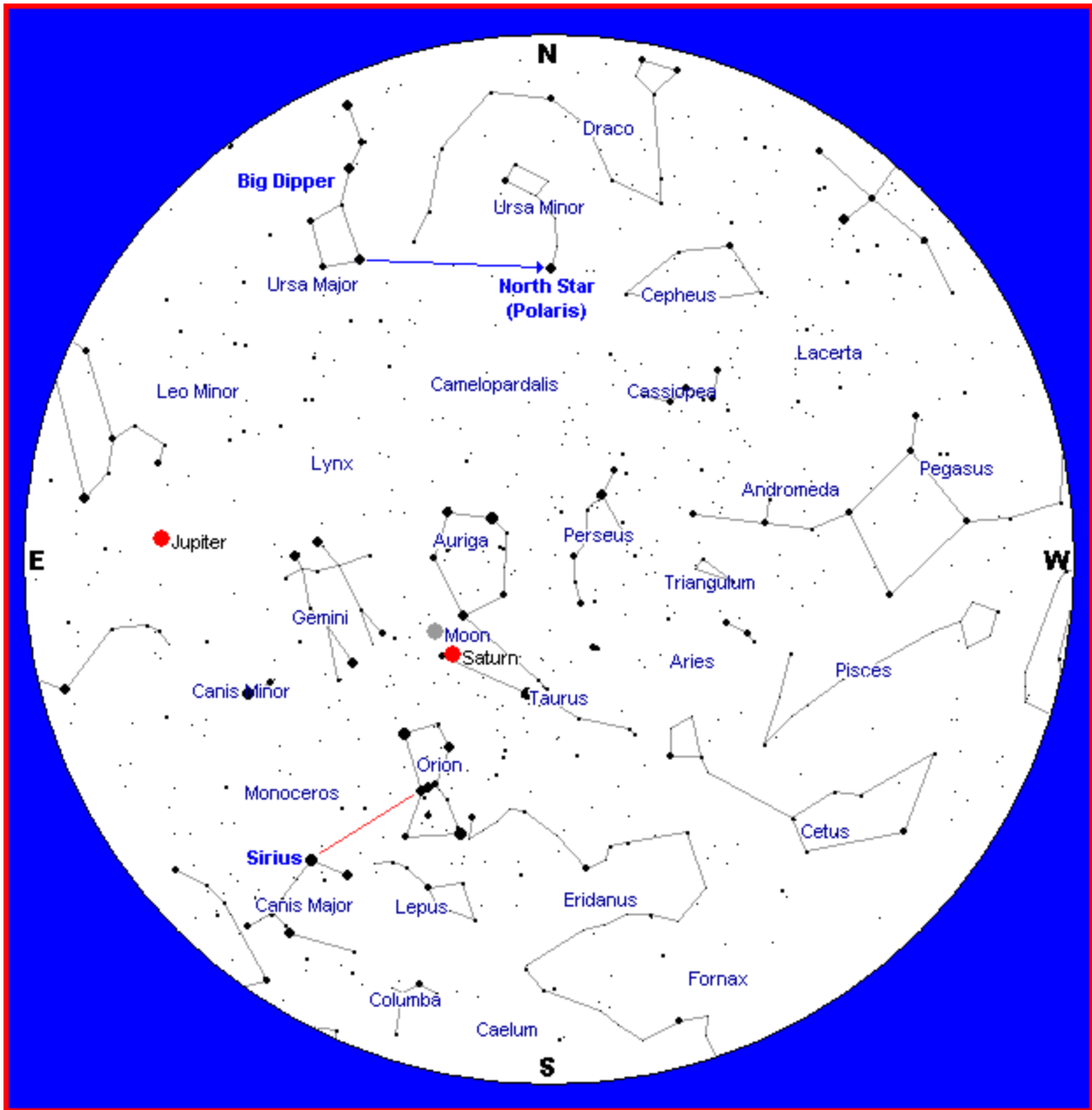
For those who are interested in bringing a group, such as schools or scouts, during the day, please call for more information. These shows are usually given on Tuesday or Thursday mornings.

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
Jan 2	7:40 A.M.	5:06 P.M.	7:42 A.M.	4:53 P.M.	New Moon
Jan 10	7:40 A.M.	5:13 P.M.	12:10 P.M.	12:15 A.M.	First Quarter
Jan 18	7:37 A.M.	5:21 P.M.	5:38 P.M.	8:06 A.M.	Full Moon
Jan 25	7:33 A.M.	5:29 P.M.	12:45 A.M.	11:51 A.M.	Last Quarter

January 2003 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.



Edited by John Hopkins
 (304)293-3422, extension 1443
 jhopkins@mail.wvu.edu

