WEST VIRGINIA UNIVERSITY
EBERLY COLLEGE OF ARTS AND SCIENCES
THE DEPARTMENT OF PHYSICS
TOMCHIN PLANETARIUM AND OBSERVATORY

Mountaineer Skies

Volume 6 Issue 3 http://www.as.wvu.edu/~planet/index.html July- September, 2006

From the Editor's Desk

Once again we will be treated to the Perseids meteor showers between the 23rd of July and the 22nd of August. The period of maximum intensity this year is on August 12 about 8:00 P.M., though all night could be interesting.

The Autumnal Equinox, the first day of Autumn begins on Saturday, September 23.

The primary subject of this and the next two issues of *Mountaineers Skies* is Stonehenge, that remarkable structure built on Salisbury Plain in southern England. We will explore the three phases of construction and try to find out who build it, how was it built, when it was built, and probably the most important question of all, why it was build.

A diagram of each phase of construction will accompany the newsletter.

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In The Sky This Month

Visible Planets in the Night Sky

Beginning of July, 2006

	Const	Rise	Transit	Set	Mag
Sun		05:56	13:24	20:51	- 26.8
Mercury	Cnc	07:44	14:52	21:58	1.6
Venus	Tau	03:57	11:13	18:28	- 3.9
Mars	Cnc	08:58	16:00	23:01	1.8
Jupiter	Lib	15:51	21:08	02:25	- 2.3
Saturn	Cnc	08:23	15:33	22:39	2.0

Beginning of August, 2006

	Const	Rise	Transit	Set	Mag
Sun		06:20	13:26	20:33	- 26.8
Mercury	Gem	05:01	12:11	19:19	1.0
Venus	Gem	04:29	11:52	19:14	- 3.9
Mars	Leo	08:35	15:12	21:49	1.8
Jupiter	Lib	13:55	19:10	00:25	- 2.1
Saturn	Cnc	06:41	13:46	20:48	1.8

Beginning of September, 2006

	Const	Rise	Transit	Set	Mag
Sun		06:49	13:20	19:51	-26.8
Mercury	Leo	06:54	13:24	19:59	- 1.7
Venus	Leo	05:34	12:25	19:17	- 3.9
Mars	Vir	08:11	14:23	20:33	1.8
Jupiter	Lib	12:11	17:22	22:33	- 1.9
Saturn	Leo	04:59	11:57	18:58	1.8

Leo	Leo, The Lion
Lib	Libra, The Scales
Gem	Gemini, The Twins
Lib	Libra, The Scales
Vir	Virgo, The Maiden
Cnc	Cancer, The Crab
Tau	Taurus, The Bull

About: Stonehenge, part 1

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In the British Isles today, nearly a thousand stone circles interrupt the flow of its rugged landscape. The Standing Stones of Callanish on the Isle of Lewis, Scotland, or the Drumskinny Stone Circle in County Fermanagh, Ireland are but a few. However, clearly the most famous one is found in southern England on a plain called Salisbury and is known as Stonehenge. This structure has fascinated and mystified man for millennia. When, how, by whom, and, most importantly, why was it built? We will try to answer as many of these questions as possible.

To begin, the word Stonehenge comes from the concatenation of two words, stone which means, of course, stone and henge which has come to mean a circular grouping of standing or upright stones or timbers. So Stonehenge means a circular grouping of upright stones.

Of the people who constructed Stonehenge, we unfortunately know very little. Some say it was built by the Romans; others say Merlin and King Arthur; still others suggest that it was built by a tribe of giants. But these are romantic myths with no basis in reality.

What is known is that they were pre-iron age, that is, the builders had no useful iron tools, nor did they have a written language, or even the use of the wheel.

We also know that they were not Druids, as Celtic priests were and are known, because the Celts only go back as far as 2500 years. The megalith known as Stonehenge is twice that old.

There are three major chapters or periods in the story of the building of Stonehenge. Chapter One began about 5000 years ago (~3000 B.C.). We know this from radiocarbon dating. In the beginning Stonehenge could be better described as "Woodhenge" as it was merely a circle of 56 tall wooden posts in individual holes, later called Aubrey Holes after their discoverer John Aubrey. Some have suggested that the 56 posts have no significance; if, on the other hand, somehow they used two posts per day, then that could represent the 28 days in a lunar cycle. The entire structure was ringed by both a ditch and an embankment of earth having a diameter of approximately 380 feet. To construct the trench and mound, simple tools were used. It is thought that animal horns were used initially as picks to break up the chalky ground of Salisbury Plain, while shoulder blades of larger animals were probably used as shovels. A gap was left in the circle making an entrance, called "the Avenue", that pointed to the Northeast. An undertaking of this size, however, would certainly have had an important purpose as attested by the effort taken, but what that purpose was continues to elude us.

In the next issue of *Mountaineer Skies*, we will learn about the second period of construction and how it was probably achieved.

2006 Planetarium Shows

August 25, 2006 *Sky Quest*	September 8 & 22, 2006 *Sky Quest*	October 13, & 27,2006 *Sky Quest*
November 10 & 17, 2006 *Sky Quest*	December 1, 8, & 15, 2006 *'tis The Season*	January 12 & 26, 2007 *Sky Quest*
February 9 & 23, 2007 *Sky Quest*	March 9 & 23, 2007 *Sky Quest*	April 13 & 27, 2007 *Sky Quest*
May 11 & 25, 2007 *Sky Quest*	June 8, 2007 *Sky Quest*	July 2007 Closed

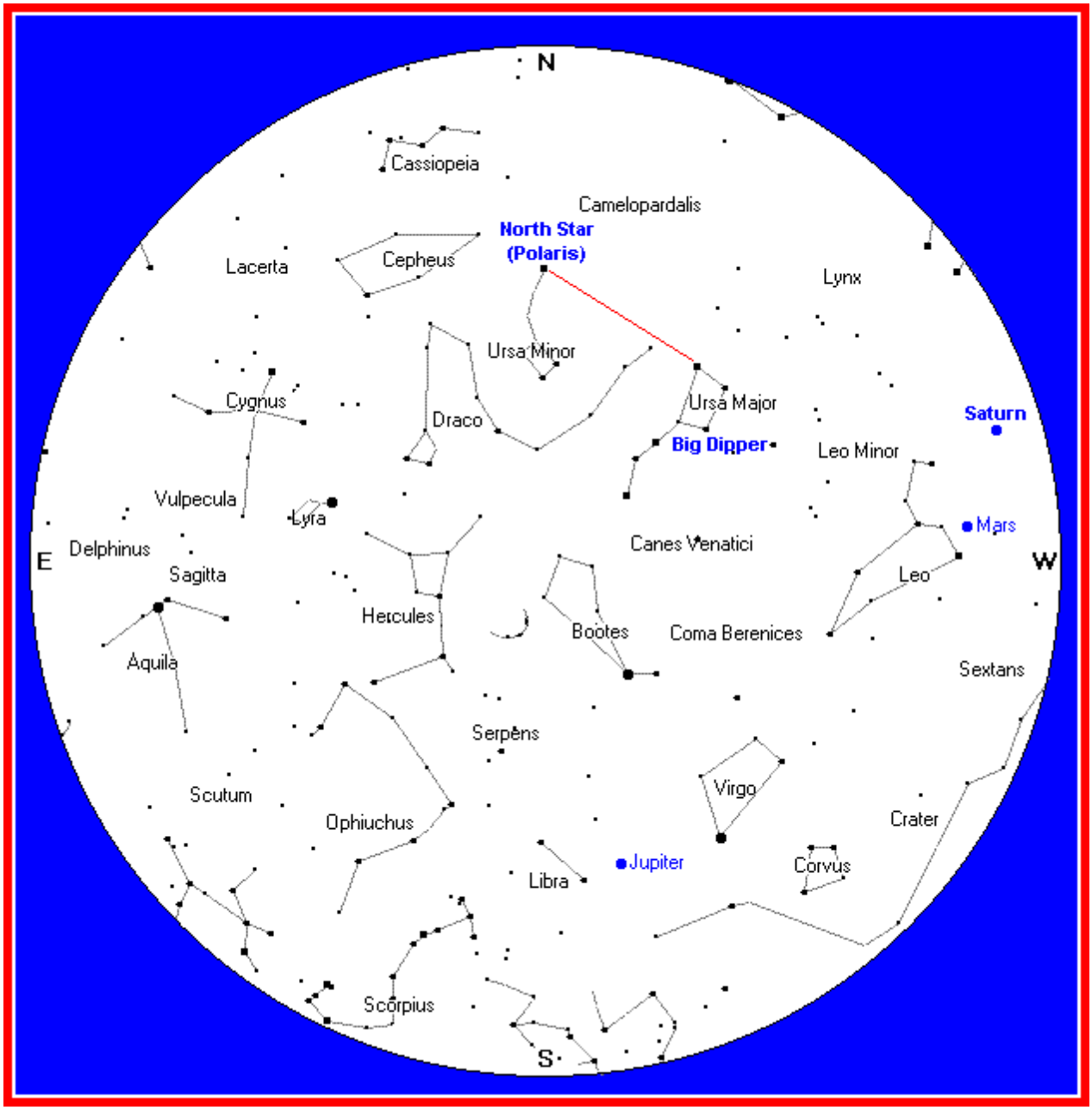
For those who are interested in bringing a group, such as schools or scouts, during the day, please call for more information. These shows are usually given on Tuesday or Thursday mornings.

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
July 3	5:56 A.M.	8:50 P.M.	1:35 P.M.	12:45 A.M.	First Qtr
July 10	6:00 A.M.	8:49 P.M.	9:04 P.M.	4:57 A.M.	Full Moon
July 17	6:05 A.M.	8:45 P.M.	12:13 A.M.	1:42 P.M.	Last Qtr
July 24	6:11 A.M.	8:40 P.M.	5:15 A.M.	8:50 P.M.	New Moon
Aug 2	6:19 A.M.	8:32 P.M.	2:30 P.M.	NA	First Qtr
Aug 9	6:25 A.M.	8:24 P.M.	8:55 P.M.	6:20 A.M.	Full Moon
Aug 15	6:31 A.M.	8:16 P.M.	11:43 P.M.	1:58 P.M.	Last Qtr
Aug 23	6:38 A.M.	8:05 P.M.	6:19 A.M.	8:15 P.M.	New Moon
Aug 31	6:46 A.M.	7:53 P.M.	2:31 P.M.	11:32 P.M.	First Qtr
Sep 7	6:52 A.M.	7:42 P.M.	7:48 P.M.	6:29 A.M.	Full Moon
Sep 14	6:59 A.M.	7:31 P.M.	11:59 P.M.	3:13 P.M.	Last Qtr
Sep 22	7:06 A.M.	7:18 P.M.	7:11 A.M.	7:20 P.M.	New Moon

July 2006 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** 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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