ECLIPSE

The Newsletter of the Barnard-Seyfert Astronomical Society

May 2001

PRESIDENT'S MESSAGE

It has been a busy month for introducing the public to the wonders of the night sky. There have been public nights, youth night, Astronomy Day, and public star parties. We owe a big "Thank you" to the members who participated in these events. I would like to encourage more members to help and I think more would if we could make this a learning experience for everyone. Some of us are intimidated by the prospect of being "the astronomer" to the public, some think they are the only one who doesn't know every object in the night sky, and some don't have a scope or think their scope is inadequate. Well none of these is a valid reason. Now here is how I propose to convince you. We can decide ahead of time on objects to view for the next public event and match each member to an object. You can learn a little about your object ahead of time. Then arrive early for the public event and we will get you set up and pointed at your object. You will get some one-on-one learning and then share it with the public. We tried this last November and I thought it worked well (except for the cold). Now that better weather is here lets try it again. Give it a try. You will have fun!

A.G. Kasselberg

MAGAZINE SUBSCRIPTIONS FOR BSAS MEMBERS 2001

We are always able to accept requests for new and renewal yearly subscriptions to SKY AND TELESCOPE and ASTRONOMY from our members in good standing.

The current yearly rates are as follows: SKY AND TELESCOPE: \$29.95 ASTRONOMY: \$29.00

Checks or Money Orders should be made out to the Barnard-Seyfert Astronomical Society (BSAS) and sent to the Treasurer at the following address:

> Powell S. Hall, Treasurer 4343 Lebanon Rd., T-1618 Hermitage, TN 37076-1223

HAPPENINGS & EVENTS

May 1 - June 16, 2001

5/4 Venus gr. brilliancy

5/7 FULL MOON; conj., Mercury and Saturn

5/10 Conj., Venus and Moon; Public Night Dyer Observatory

5/13 Conj., Neptune and Moon

5/15 LAST QUARTER; Conj., Uranus and Moon

5/16 Conj., Mercury and Jupiter

5/17 BSAS meeting, 7:30 p.m. at Dyer.,

Dr. Douglas Hall speaks about photometry

5/19 Conj., Venus and Moon

5/22 NEW MOON; Mercury at greatest elongation East

5/24 Youth Night at Dyer 7:30 p.m. - 9:30 p.m.; Conj., Jupiter and Moon; Conj., Mercury and Moon

5/25 Conj., Saturn and Uranus

5/26 Private Star Party, Natchez Trace Site

5/29 FIRST QUARTER MOON

6/3 Pentecost

6/4 Pluto at opp.

6/5 FULL MOON

6/6 Conj., Mars and Moon

6/10 Conj., Neptune and Moon

6/11 Conj., Uranus & Moon

6/13 LAST QUARTER MOON; Mars at opp.

6/14 Conj., Jupiter & Sun

6/16 Private Star Party, Natchez Trace Site

Dues Information

On your Eclipse mailing label is the expiration date for your current membership in the BSAS. There will be a two month grace period before

any member's name is removed from the current mailing list. You will be receiving a number of warnings informing you that your membership is expiring.

Dues are \$20.00 per year for Regular and Family membership and \$15.00 per year for Seniors (over 60 years of age), and \$10.00 for Students (under 22 years of age). Please call the Dyer Observatory (373-4897) if you have questions. Dues can be sent to:

Powell S. Hall, Treasurer 4343 Lebanon Rd., T-1618 Hermitage, TN 37076-1223 The Eclipse Newsletter Editor: Powell S. Hall powell.hall@worldnet.att.net

BSAS Officers:

A.G. Kasselberg, President
Lonnie Puterbaugh, Vice President
William A. Hayden, Secretary
Powell S. Hall, Treasurer
Board of Directors
Kris McCall, Ch.
Mike Benson
Douglas Hall
Curt Porter
Lloyd Watkins
Logo Photograph:

Francisco Diego

MINUTES OF 19 APRIL 2001 BSAS MEETING AT DYER OBSERVATORY

by Bill Hayden

Vice President Lonnie Puterbaugh called the meeting to order at 7:30 PM. Visitors were introduced and allowed to see the telescopes, Dr. Hall having put forth that first time visitors generally have interests extending beyond a meeting. Lonnie read an article from The Tennesseean illustrating the positive impact upon some who visited Dyer at the March Public Night. He mentioned that fourth Thursdays through October are now designated Dyer Youth Nights.

Janaruth Ford asked for and received a good showing of hands for volunteers during Astronomy Day at Cumberland Science Museum, April 28. Mitzi Adams of NASA is scheduled to speak at 12:15 and Dr. Frank Drake of SETI at 2:00. Lightning 100 radio is to broadcast from Warner Park during our star party on the 27th; the Renaissance Center is the site for a star party the 28th. Dr. Drake will also speak to invited guests at Dyer at 2 PM the 29th, the first of a series of DeWitt lectures.

Kris McCall announced public star parties for June 23 at Long Hunter and August 11 (Perseids) at Warner Park.

Treasurer Powell Hall reported a balance of \$3828.82.He read a list of our eleven new members since the previous meeting.

On May 2, the BSAS Board of Directors will meet at the museum, to be preceded by a TNSP 2001 food committee meeting at 6:30. Much of the framework for that event, to begin Oct. 18, should be laid as a result.

Radio Astronomy was the subject of Curt Porter's fine feature program. He noted that the first official attempt to receive a signal from space was during a close approach of Mars in summer, 1920. A mystery still surrounds a signal picked up at Ohio St. U. in 1971. Curt displayed antennae and recommended the book, Radio Astronomy by John D. Kraus. Some members commented that they had heard radio signals bouncing off meteors or reentering spacecraft. Bill Hayden said 105.5 was the closest he had found to a signal-free FM frequency locally.

The meeting was adjourned at 8:57. Overcast skies rendered a first magnitude pass of the International Space Station unobservable.

Schedule at Sudekum Planetarium May 2001

Present through May 27:

Mondays through Fridays:

3:15 p.m. "In Search of New Worlds:

Saturdays:

11:30 a.m. "In Search of New Worlds" 1:00 p.m. "Skies Over Nashville" 2:30 p.m. "Explorers of Mauna Kea" 3:30 p.m. "In Search of New Worlds"

Sundays:

1:30 p.m. "Explorers of Mauna Kea" 3:30 p.m. "In Search of New Worlds"

Memorial Day, May 28, through June 30:

Mondays through Fridays:

11:30 a.m. "In Search of New Worlds" 1:00 p.m. "Explorers of Mauna Kea" 2:30 p.m. "In Search of New Worlds" 3:30 p.m. "Explorers of Mauna Kea"

Saturdays:

11:30 a.m. "In Search of New Worlds" 1:00 p.m. "Skies Over Nashville" 2:30 p.m. "In Search of New Worlds" 3:30 p.m. "Explorers of Mauna Kea"

Sundays

1:30 p.m. "In Search of New Worlds" 3:30 p.m. "Explorers of Mauna Kea"

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- Series 4000 Telenegative 2x Barlow
- Tele-extender & 11/4" Eyepiece holder
- 4 Filters (#21, #80A, #23A, POL)
- Optical tube & eyepiece carrying cases

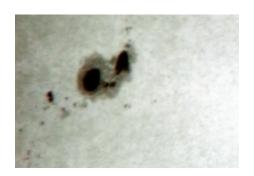
\$ 2500.00 615.882.0790

MAY MEETING LOCATION
The May meeting will be held at Dyer Observatory

Astronomy Day Photos by Gene Wright at Cumberland Science Museum

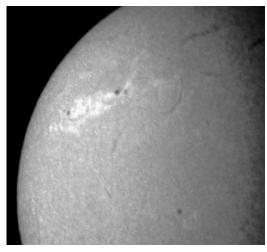


Both taken through Lonnie Puterbaugh's Takahashi Telescope with a hand held digital camera.





Dr. Drake with Liz and Rocky Alvey.



Solar Storms in H alpha with Photospheric detail.

HOT FLASHES by Gerald Lappin

From the weather as I write it seems that one should see Cygnus high in the sky instead of Leo. Your Jerryatric astronomer is really having hot flashes, which may affect his mind so who knows where this column may lead.

Panspermia, the concept that life originated in space or some remote region of the cosmos and arrived on earth aboard comets or stardust, still has many adherents. Recently University of California astronomer, Jennifer Blank, and her coworkers added some possible support to this idea. They fired soda-can sized high velocity bullets at a target containing various amino acids. Not only did these building blocks of living matter survive this simulated cometary impact but also they bonded to make protein like polymers. They interpret these results as supporting the idea that real cometary impacts might have triggered the development of primitive life forms. Of course, Jennifer was firing blanks. Her comets contained no seeds of life themselves but only helped along those already here. It seems to me that much more far reaching conclusions can be drawn from this experiment. First of all, soda cans are not comets but suppose the original missiles were really cans. What better way could exist for an older and neater civilization to rid itself of unwanted wastes than sealing them up in metal containers and firing them off into space, neither knowing or caring what happened to them. (We have similar practices except that we bury the cans and forget them.) Protected from cosmic radiation by the metal package these cans containing alien bacteria, fungi, viruses and even small living critters eventually might have reached an otherwise sterile earth, contaminating the environment with life. My thought for the month is "Let's not get too proud of ourselves. We may just be the descendants of this alien garbage."

May 2001 Editorial

THREE WAYS TO LEARN THE SKY: HINTS FOR BEGINNERS

Your editor is writing this on a day when he is scheduled to talk with a group of eleven year olds about stars. They are beginners. Several new member of the B.S.A.S., who are well past the age of eleven, are also beginners, at least some of them. We welcome them all. I hop the following suggestions may be useful.

First the method that W. S. Kals sets forth in his book <u>Stars and Planets</u>. His way, good even in light-polluted large cities, is to learn only the very brightest stars at first. These are the first-magnitude stars. In our part of the world we see only fifteen first-magnitude stars. Kals puts fourteen together in three patterns, superconstellations:

- (1) a triangle (the Summer Triangle);
- (2) a double triangle, of which Arcturus and Spica form the common side and Regulus and Antares the extreme tips; and
- (3) a hexagonal group containing the bright winter stars.

Lonely Fomalhaut is the sole exception, not being grouped with any other star. Kals presented basically the same outline in an even earlier book, <u>The Star-Gazer's Bible</u>. One need to learn the naked-eye planets, too, which somewhat resemble the brightest stars but do not stay put and thus form no permanent pattern, such as the stars do.

The second method is to learn the stars and constellations by their seasons. This approach may, of course, be combined with Kals'. An excellent example is Terence Dickinson's book, **Summer Stargazing**. The classic little handbook <u>Stars</u> by Zim and Baker in the Golden Guide series includes a beautifully illustrated section presenting the stars by their seasons.

The third way, and the one I used fifty-six years agon when I really got interested in the sky, is to learn one constellation. After one familiarizes onself with it, its shape, its direction, its rising time, and its season of the year, one can extend in any direction as time, interest, and weather permit. I started with Perseus in the fall of 1944. I already knew the Dippers and Cassiopeia. From Perseus I located Aries, Andromeda, Pegasus, and other constellations. Many begin with the Big Dipper in the constellation Ursa Major.

Happy star finding!

Powell Hall

NEW DIRECTIONS TO BSAS DARK-SKY SITE

Go west on Old Hickory Blvd. from I-65, 4.5 miles to Hillsboro Rd. Go south on Hillsboro Rd. for 3.4 miles to Highway 46 and turn right. You will see Grassland Elementary school on the left as a landmark.

- "Follow Highway 46 for 5.8 miles to Highway 96 and a flashing red light.
- "Continue straight on Highway 46 for 6.0 miles through Leiper's Fork to a right turn just outside of town, to stay on route 46.
- "Continue on Route 46 for 0.9 miles to Natchez Trace Parkway."
- "Follow the entrance ramp to the Parkway and turn right, toward Tupelo, Mississippi.
- "Follow the Parkway for 17.2 miles, passing Old Trace and Burns Branch, to the "Water VAlley" overlook. Our site is the parking area.

(THIS NEW SITE IS 12 MILES FARTHER SOUTH PAST THE OLD SITE WHICH WAS AT MILE MARKER #424)