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## COMET QUIZ

The great comet is almost upon us. You've probably read the myriad of news items and seen the abundance of books coming out on the subject, but how well do you REALLY know comets? Well, here are some simple questions you can quiz yourself or an astronomy minded friend with...

WHEN WAS THE 1ST TELESCOPIC OBSERVATION OF A COMET MADE?  
[ In 1618 by J. Cysat ]

WHAT WAS THE FIRST COMET KNOWN TO HIT THE SUN?  
[ Was 1979 XI on August 31st of that year ]

WHAT COMET HAS THE SHORTEST KNOWN PERIOD?  
[ Encke...3.3 years. Comet Wilson-Harrington discovered in 1949 had a calculated period of 2.3 years but has never been seen again. ]

COMET WHICH HAS PRESENTED MOST OBSERVED RETURNS?  
[ Again is Encke. The 1977 return was the 51st ]

COMET WITH THE LONGEST CONFIRMED PERIOD?  
[ Grigg-Mellish...observed at the returns of 1742 and 1907, a period of 164 years. The second place comet is Herschel-Rigollet with a period of 156 years. These are the only 2 comets with longer periods than Halley's. ]

WHAT IS THE MOST FAMOUS 'LOST' PERIODICAL COMET?  
[ Biela...at the 1846 return it separated into two; the twins returned in 1852 but have never been seen since ]

WHAT WAS THE BRIGHTEST COMET OF MODERN TIMES?  
[ Probably that of 1843. According to the famous astronomer Sir Thomas Maclear, it was much more brilliant than the comet of 1811; and Maclear saw both. ]

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## Comet Quiz cont.

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WHAT IS THE CLOSEST COMETARY APPROACH TO EARTH EVER RECORDED?  
[ Lexell's Comet of 1770 (discovered by Messier on June 14 of that year, Lexell of St. Petersburg computed the orbit. The distance was 1.2 million km and the comet was visible with the naked eye. It has not been seen again. ]

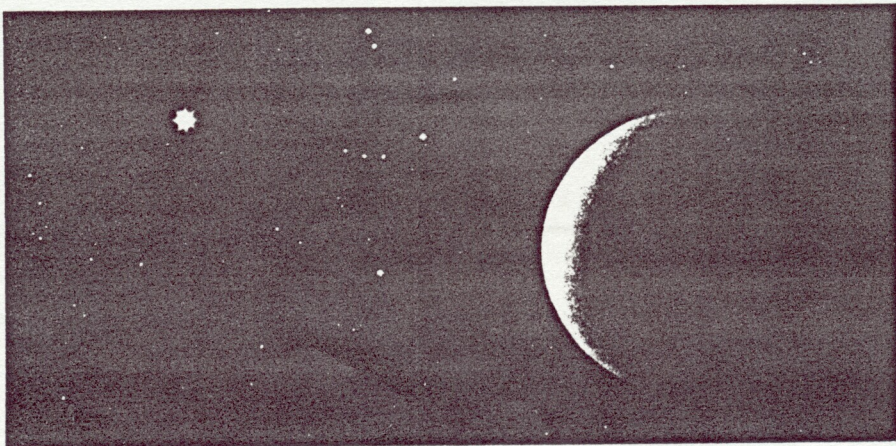
WHAT IS THE LARGEST COMET EVER RECORDED?  
[ Comet of 1811...diameter of coma was appr. 2 million km, larger than the Sun, and the length of the tail was over 160 million km. ]

WHAT WAS THE LONGEST TAIL EVER RECORDED?  
[ The tail on the Great Comet of 1843 was 330 million km ]

WHAT COMET HAD THE MOST TAILS?  
[ The Comet of 1744 discovered by Klindenberg in Holland, there were at least 6 bright, broad tails...but records are sparse. ]

WHO HAS DISCOVERED THE MOST COMETS?  
[ J.L. Pons who discovered a total of 37. Messier discovered 13, and in the process compiled his famous catalog. ]

So, how did you do? If you got 12 out of 12 I'd say you really know your stuff...when I first tried these questions I did, well, not very well to say the least. But being the comet novice that I am I did learn one thing. It is good to keep in mind during these times of comet Halley that there have been bigger, brighter, and better comets, but none quite so famous.

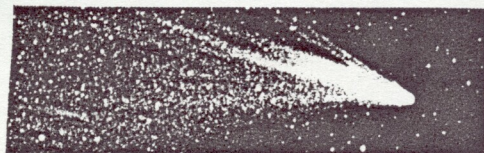
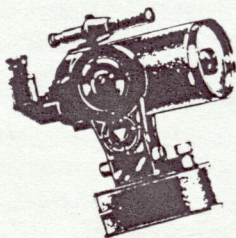


# Presidents' Message

Time for the PAC to rise and shine again...well, what I mean is, it's time for us to start working on Astronomy Day 1985. This year is special as far as astronomy days go. It's a great time for the PAC to combine it's own promotion with the coming of Halley's Comet. The press is already picking up on Halley's hype, and there's no reason that the PAC can't get in on what is rightfully the PAC's in the first place (we own the rights to all knowlegde of space, don't we?). At the last meeting we decided to devote a special display to the comet and to flood the public with Halley T-shirts and information booklets. There's no reason we can't get into the act and give the wanting public our undivided attention in the matter.

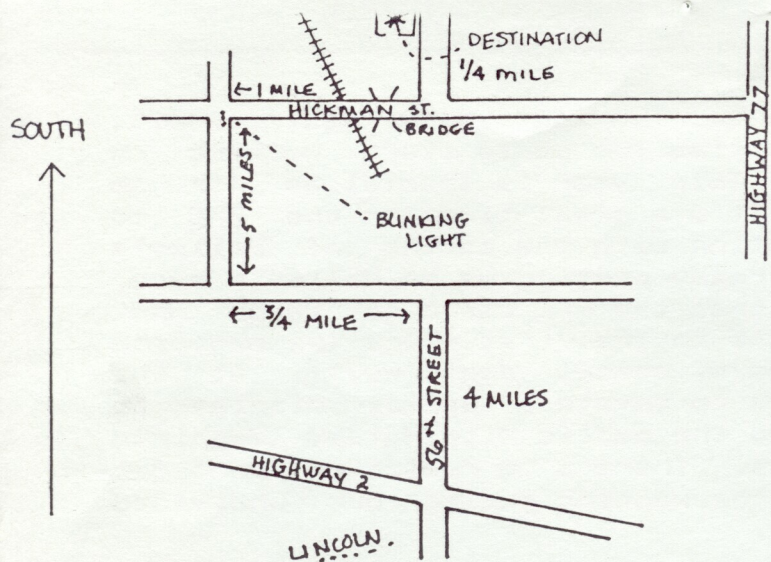
Speaking more of Astronomy Day, Bev Hetzel will be heading up the PAC efforts this year. I hope everyone can get into the act and help make the day as successful as it was last year. As you may have noticed by our last club member listing, we have been dropping somewhat in membership figures. Astronomy Day is a great way to get to the public and let them know that we exist. Let's see if we can't pick up some new members this coming April!!! See you at the meeting...

John Lortz



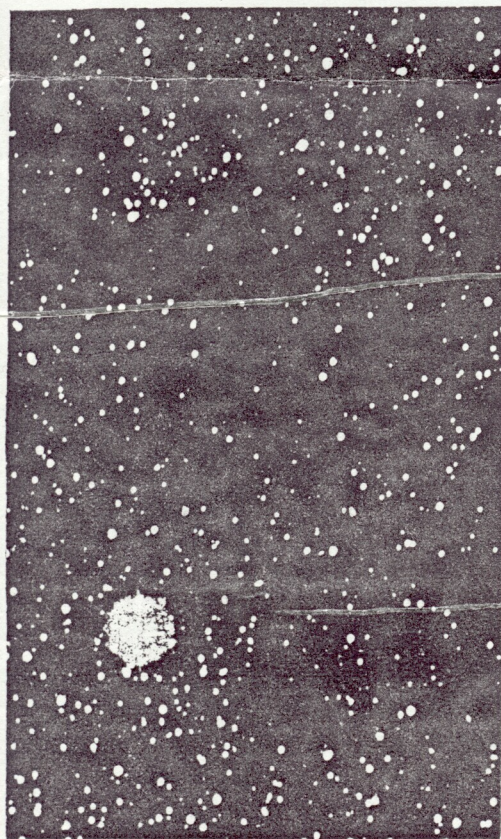
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The Prairie Astronomer is published monthly by the Prairie Astronomy Club and is free to all club members. Membership expiration date is always listed in the right corner of the newsletter mailing label. Address all membership renewals to: PRAIRIE ASTRONOMY CLUB, INC., P.O. BOX 80553, LINCOLN, NE 68501.

For further club membership information or suggestions contact one of the following: John Lortz (Pres.) 572-1451(Omaha), Ron Veys (V.Pres) 464-1449, Bev Hetzel (Sec.) 435-7881, Lee Thomas (Tres.) 483-5639, or Andy Corkill (Prgm. Chair.) 488-1096. All articles for the newsletter should be sent to newsletter editor, JOHN LORTZ 3119 MAPLEWOOD BLVD. #41, OMAHA, NE 68134, no later than 10 days before each club meeting date.



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 MAP TO  
 EARL MOSER'S  
 HOUSE. (MAP  
 IS NOT TO  
 SCALE)  
 ☺

## DEFINING ASTRONOMY



### SIDEREAL TIME...

A time system based on the rotation of the Earth measured relative to the background stars, which for this purpose are regarded as fixed in position. Relative to the stars, the Earth rotates on its axis in a period of 23 hours 56 minutes 04.1 seconds of mean time (ordinary civil time), and this period is called the sidereal day, which is, in turn, divided into 24 sidereal hours.

For an observer located at a particular longitude on the Earth, the sidereal day is equivalent to the apparent rotation period of the celestial sphere. This period may be determined by measuring the interval between two successive upper transits of a given star across his meridian. The value of sidereal time at any instant is defined to be the hour angle, i.e. the angle measured clockwise from the meridian, of the Vernal Equinox (a fixed point on the celestial sphere). Thus when the vernal equinox is on the meridian, its hour angle is zero, and the sidereal time is zero hours.

# OBSERVING CHAIRMAN'S REPORT

The next star party's are scheduled for March 15th and 22nd. Please come, even if it's only to make snide remarks about your observing chairman's weird behavior (I HATE observing by myself).

Start March out right by looking at M41, a nice open star cluster in Canis Major. Look about four degrees south of Sirius and use fairly low power. An eight inch will show many of the stars' colors with several orange and many blue stars being easily seen.

Get two objects for the price of one by looking five degrees south of alpha Monocerotis for the open cluster M46 and the planetary nebula NGC 2438. The cluster is fairly easy to see even in a small instrument but the planetary requires at least a six inch telescope for easy visibility. NGC 2438 lies at the northern edge of M46 and looks a bit like the ring nebula in Lyra.

Most binocular users know how nice M44, the Beehive cluster looks, but can they find M67? It is about two degrees west of Alpha Canceri and shows a multitude of faint stars in most telescopes.



by  
David Knisley

Is there anything worth looking at in Lynx? You bet, if you like bright edge-on galaxies. NGC 2683 is a 10th magnitude spindle of light that should be visible in a four inch. Larger telescopes will begin to show some mottling near the center. For owners of small telescopes, galaxies are usually the most frustrating objects to find. For those who want to keep trying, why not try NGC 2903 in Leo. It is located 1 1/2 degrees south of Lambda Leonis and should just be within range of a three inch telescope.



### THIS MONTH'S PROGRAM...

Postponed from last month is Jack Dunn's program from the planetarium entitled "Halley's Comet Show". (Hey, by the time the comet hits our skies, we may even know something about it !)

### IMPORTANT DATES

- M 6th Full Moon 12:13 UT
- A
- R 15th Star Party At Earl's
- C
- H 20th Vernal Equinox 11:14 UT
  
- 21st New Moon 6:59 UT
  
- 26th PAC Meeting 7:30pm

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