

# So what's the full story behind the full moon?

Full Moon is at 4:28 p.m. on Jan. 15. The moon is opposite the sun, as seen from the earth, and is fully lit. It will rise as the sun sets and be visible all night. This will be the closest full moon for the entire year. Just like the earth's orbit around the sun, the moon's orbit around the earth is not a perfect circle.

There is a time each month when the moon is at its closest, and another time when it is at its farthest. The January Full Moon just happens to occur when the moon is at its closest point. The gravitational pull of the moon affects the tides on the earth, so the January Full Moon will produce unusually high tides.

**SHOULD THE JANUARY Full Moon have an effect on people?**

Some people believe the Full Moon influences human behavior, but it really shouldn't. After all, the moon is ALWAYS somewhere in orbit around the earth. If it had an effect on people, it should be a constant one and not depend on how much of the moon is illuminated or not.

The bright star 6 degrees above the moon at 8:30 p.m. on the 21st is Regulus (REG u lus), the "heart" of Leo. The name Regulus means "the king" and it's appropriate that it's the brightest star in the constellation that honors the King of the beasts.

A large triangle is formed by the moon, Regulus and Jupiter on the

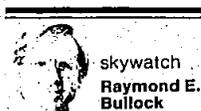
morning of the 22nd. Jupiter is the bright "star" above the moon. Get out that telescope! Even a small telescope will show Jupiter's four largest moons. Galileo observed the moons in the year 1610 and concluded that if another planet had moons in orbit around it, it violated the popular belief that everything was in orbit around the earth. If that were the case, could not the earth, and other planets, be in orbit around the sun? That was not a popular question to ask at the time.

The moon is in Virgo, approaching the star Spica (SPY ka), on the morning of the 25th. Spica is about 275 light years away. It must be an incredibly luminous star to appear so bright from such a distance!

Last Quarter Moon is at 10:27 a.m. on January 26. The moon is beginning the last-quarter of its orbit around the earth.

For the second time this month, the moon is in Scorpius. It is approaching Antares on the morning of the 26th, and has passed that star by the following morning. Notice brilliant Venus, 22 degrees to the left of the moon. Draw a line from the moon, past Venus and you'll come to Mars which is located 10 degrees to the lower left of Venus. Now you are ready to look for Uranus and Neptune!

**MARS PASSES BOTH Uranus and Neptune from Jan. 29-Feb. 1.** To see Uranus and Neptune you will need a



skywatch  
**Raymond E. Bullock**

telescope and it still won't be easy. These two planets are very far away, don't reflect a lot of sunlight and are faint objects. Another problem is their location near the horizon. When you use a telescope to magnify an object, you also magnify the distortion produced by our atmosphere. The closer to the horizon, the greater the distortion. Adding to the problem will be the start of morning twilight; as the sky reddens and brightens, the planets will fade from view.

On Jan. 29, Mars will be 0.5 degrees to the right of Uranus. Through a telescope Uranus will look like a faint greenish disk. About 3 degrees to the left of Mars (2.5 de-

grees to the left of Uranus) is Neptune. (Be aware that astronomical telescopes invert the image; right becomes left and left becomes right in an astronomical telescope.) Neptune is a gas giant planet like Uranus; it, too, will look like a green object, but will be even fainter than Uranus. Uranus and Neptune both have a ring system, but they are nowhere as impressive as Saturn's system. The rings will not be visible through your telescope.

On Thursday morning, Jan. 30, Mars is 0.6 degrees directly below Uranus, and on the 31st forms a triangle with Uranus and Neptune. Notice the moon, one degree to the right of Venus. On Saturday, Feb. 1, the moon gets into the Mars-Uranus-Neptune act. Mars is immediately adjacent to the moon's lower cusp (point of the crescent) and Neptune is adjacent to the upper cusp.

Uranus and Neptune are two of the three most distant planets. English astronomer William Herschel accidentally discovered Uranus in 1781, while looking for new comets

with a crude telescope. Uranus takes 84 years to complete an orbit around the sun and is nearly three billion km (1.8 billion mi) away.

**THAT IS TOO FAR** to be able to study it in any detail with ground-based telescopes. The planet Neptune wasn't discovered until 1846. (Galileo had seen Neptune while observing Jupiter in January 1613, but didn't realize it was a new planet.) Neptune is nearly 4.5 billion km (3 billion mi) from the Sun. It takes 165 years to complete an orbit, so it hasn't made quite a full circle around the Sun since it was discovered.

At this time Neptune, not Pluto, is the farthest planet from the sun. This is because of Pluto's extremely

elliptical (oval) orbit. Pluto will be closer to the sun than Neptune until 1992. A collision between the two will not occur when they cross over because Pluto's orbit is tilted 17 degrees with respect to the other planets. When the cross-over occurs the planets are at different altitudes.

If you were successful in your quest for Uranus and Neptune, you should congratulate yourself for a job very well done!

An excellent aid for learning constellations and keeping up to date with the sky is the monthly "Sky Calendar." A one-year subscription is \$6.00 and is available from the Abrams Planetarium, Michigan State University, East Lansing, 48824.

WNC 100.3 fm & the Grand Manor at Fairlane cordially invite you to a

## WEDDING extravaganza

Sunday, January 19, 1992 • 1:30-4:30pm

TALK WITH PROFESSIONALS FROM...

- Grand Manor at Fairlane
- 1992 Wedding Packages • Private room capacities for 50-200 guests
- Hudsons Bridal Salon • Russell's Tuxedos
- Lieberman Photography • Playart of Paris
- Memorable Occasions • Viviamo Floral
- Fony-Stein Entertainment Agency
- Wedding Cakes by Iccorrens
- Heritage Club Limousine
- Hallosley Travel Service

Reception, dinner, and a champagne toast to the Bride and Groom! Special drawing for a honeymoon cruise, resort getaway weekend, gift certificates, package discount...and much, much more!

Experience the Grand Manor's way of "Tying the Knot"

*Grand Manor*  
at FAIRLANE

1900 Hubbard Dr. • Dearborn • N. of Fairlane Mall • 36-4900  
Personal Check, Visa or Mastercard accepted

### COIN, STAMP COMIC BOOK and SPORTSCARD SHOW

Fri 1/17 • Sat. 1/18 • Sun. 1/19

### MACOMB MALL

Gratiot at 13 1/2 Mile, Roseville

### SPORTS STARS APPEARING

Sat. Jan. 18, 1-9 p.m.  
Detroit Tiger Star Dan Petry  
Sun. 1/19, 1-4 p.m.  
Major League Star Ernie Whit

**FREE** 1955-5 to Brilliant Inc. at participating coin tables WITH THIS AD

**FREE ADMISSION**



Jan 24-25-26, Livonia Mall  
Jan 31, Feb 1-2, Westwood Mall Jackson  
Feb. 7-9, Wonderland Mall

**FREE AUTOGRAPHS**

### Q&E Classifieds work!

### COMPUTERIZE INC.

IBM COMPATIBLE	250-2500	250-2500
IBM 386	250-2500	250-2500
IBM 486	250-2500	250-2500
IBM 586	250-2500	250-2500
IBM 686	250-2500	250-2500
IBM 786	250-2500	250-2500
IBM 886	250-2500	250-2500
IBM 986	250-2500	250-2500
IBM 1086	250-2500	250-2500
IBM 1186	250-2500	250-2500
IBM 1286	250-2500	250-2500
IBM 1386	250-2500	250-2500
IBM 1486	250-2500	250-2500
IBM 1586	250-2500	250-2500
IBM 1686	250-2500	250-2500
IBM 1786	250-2500	250-2500
IBM 1886	250-2500	250-2500
IBM 1986	250-2500	250-2500
IBM 2086	250-2500	250-2500
IBM 2186	250-2500	250-2500
IBM 2286	250-2500	250-2500
IBM 2386	250-2500	250-2500
IBM 2486	250-2500	250-2500
IBM 2586	250-2500	250-2500
IBM 2686	250-2500	250-2500
IBM 2786	250-2500	250-2500
IBM 2886	250-2500	250-2500
IBM 2986	250-2500	250-2500
IBM 3086	250-2500	250-2500
IBM 3186	250-2500	250-2500
IBM 3286	250-2500	250-2500
IBM 3386	250-2500	250-2500
IBM 3486	250-2500	250-2500
IBM 3586	250-2500	250-2500
IBM 3686	250-2500	250-2500
IBM 3786	250-2500	250-2500
IBM 3886	250-2500	250-2500
IBM 3986	250-2500	250-2500
IBM 4086	250-2500	250-2500
IBM 4186	250-2500	250-2500
IBM 4286	250-2500	250-2500
IBM 4386	250-2500	250-2500
IBM 4486	250-2500	250-2500
IBM 4586	250-2500	250-2500
IBM 4686	250-2500	250-2500
IBM 4786	250-2500	250-2500
IBM 4886	250-2500	250-2500
IBM 4986	250-2500	250-2500
IBM 5086	250-2500	250-2500
IBM 5186	250-2500	250-2500
IBM 5286	250-2500	250-2500
IBM 5386	250-2500	250-2500
IBM 5486	250-2500	250-2500
IBM 5586	250-2500	250-2500
IBM 5686	250-2500	250-2500
IBM 5786	250-2500	250-2500
IBM 5886	250-2500	250-2500
IBM 5986	250-2500	250-2500
IBM 6086	250-2500	250-2500
IBM 6186	250-2500	250-2500
IBM 6286	250-2500	250-2500
IBM 6386	250-2500	250-2500
IBM 6486	250-2500	250-2500
IBM 6586	250-2500	250-2500
IBM 6686	250-2500	250-2500
IBM 6786	250-2500	250-2500
IBM 6886	250-2500	250-2500
IBM 6986	250-2500	250-2500
IBM 7086	250-2500	250-2500
IBM 7186	250-2500	250-2500
IBM 7286	250-2500	250-2500
IBM 7386	250-2500	250-2500
IBM 7486	250-2500	250-2500
IBM 7586	250-2500	250-2500
IBM 7686	250-2500	250-2500
IBM 7786	250-2500	250-2500
IBM 7886	250-2500	250-2500
IBM 7986	250-2500	250-2500
IBM 8086	250-2500	250-2500
IBM 8186	250-2500	250-2500
IBM 8286	250-2500	250-2500
IBM 8386	250-2500	250-2500
IBM 8486	250-2500	250-2500
IBM 8586	250-2500	250-2500
IBM 8686	250-2500	250-2500
IBM 8786	250-2500	250-2500
IBM 8886	250-2500	250-2500
IBM 8986	250-2500	250-2500
IBM 9086	250-2500	250-2500
IBM 9186	250-2500	250-2500
IBM 9286	250-2500	250-2500
IBM 9386	250-2500	250-2500
IBM 9486	250-2500	250-2500
IBM 9586	250-2500	250-2500
IBM 9686	250-2500	250-2500
IBM 9786	250-2500	250-2500
IBM 9886	250-2500	250-2500
IBM 9986	250-2500	250-2500
IBM 10086	250-2500	250-2500

Please tell me how I can make a difference.

If I would like to help a child on an ongoing basis. Please send my assignment package and information about sponsoring a \_\_\_ boy \_\_\_ girl. My first monthly gift of \$21 is enclosed.

If I want to learn more about the child assigned to me. If I accept the child. I'll send my first \$21 monthly gift within 10 days. Or I'll return the material so someone else can help.

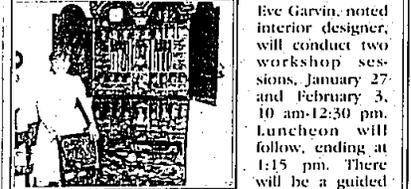
If I can't sponsor a child now, but am enclosing \$ \_\_\_ to help poor children. Please use my donation whenever the need is the greatest.

If I would like to receive information about helping children by making a special or deferred gift. Please send me information about living trusts and including Christian children's fund in my will.

NAME \_\_\_\_\_  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_  
 STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**CHRISTIAN CHILDREN'S FUND**  
 2821 Emerywood Parkway  
 Richmond, VA 23261-5066

### Interior Design Workshop

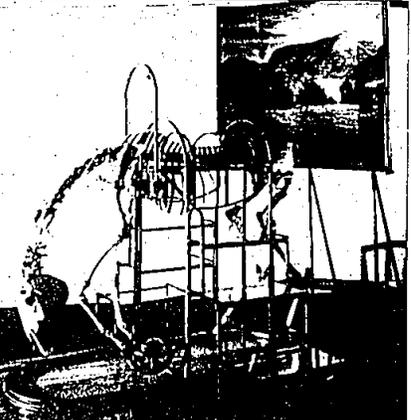


Eve Garvin, noted interior designer, will conduct two workshop sessions, January 27 and February 3, 10 am-12:30 pm. Luncheon will follow, ending at 1:15 pm. There will be a guided tour of The Michigan Design Center after the February 3rd session, plus an optional trip to the home of artist Richard Jerzy.

This program has been given successfully at The Grosse Pointe War Memorial for the past four years.

Eve Garvin's work has been featured in THE DETROIT FREE PRESS, MICHIGAN HERALD TRIBUNE, SUN-SENTINEL, MICHIGAN BEAUTIFUL, OAKLAND PRESS and OBSERVER ECCESTRIC NEWSPAPERS.

- Subject Covered:
- Color
  - Identifying Periods
  - Materials
  - Mixing of Periods
  - Window and Wall Coverings
  - Architectural Detail
- Your Design Problems In Open Discussion
- Mid-America Room  
 Place: Michigan Design Center  
 1700 State Street • Detroit  
 Call 569-5418 For Details  
 (Cash fees returned are suggested)



Steve Barry's environmental concerns are reflected in his 1991 sculpture *Convergence (The Fifth Horse)*, complete with moving parts.

### TENTH ANNUAL AWARDS IN THE VISUAL ARTS

now through January 26  
 "An arresting overview of individuals who are producing significant art in America"  
 —The Christian Science Monitor

**The Toledo Museum of Art**  
 2445 Monroe at Scottwood, (419) 255-8000 • Daily 10a-4p, Sunday 1-5, Closed Mondays  
 Tickets available at the door or call (419) 243-7000

TRUCKS presents

## MICHIGAN WINTER ICE FESTIVAL

Michigan State Fairgrounds  
 JAN. 24 - FEB. 2  
 A Celebration of Winter Family Fun

- **INTERNATIONAL ICE SCULPTURES** - The centerpiece of the Event! Over 1 million pounds of ice transformed into a breathtaking display. Take a "Walk Through Time" in ice & lights!
- **ICE CARVING COMPETITION** - Chefs from around the world compete for cash and prizes.
- **WINTERFEST FOOD COURT** - All the activity made you hungry? The WinterFest Food Court is sure to satisfy with an appetizing array of foods from around the world. From All-American Classics like pizza, hot dogs, soups and chili, to International Favorites. Plus! Quench your thirst with a wide selection of beverages from frothy hot chocolate to frosty beer. Come in, sit down and enjoy WinterFest!
- **TV50 KIDSFEST** - A flurry of fun for the entire family! Carnival rides, puppet theatre, sing-alongs, cartoon characters and much, much more! See the Michigan Thanksgiving Parade floats. All free with your admission ticket.
- **MILLER GENUINE DRAFT SNOWMOBILE RACES** - Thrill to professional snowmobile races for cash and prizes. Sat., Feb. 1 and Sun., Feb. 2 only.
- **WINTERFEST TRADE COURT** - Something for everyone under one roof! Handcrafters Arts & Crafts, the Ski & Sports Expo and much more...all at Winterfest prices! (Fridays, Saturdays and Sundays only).

PLUS...Free Red Wings autograph sessions • Horse-drawn carriage rides • Celebrity Dog Sled Races • and much, much more!

**TICKETS:** Adult \$6 (\$4 in advance), Kids (under 12) \$3

Available at all **TICKETMASTER** Centers and the Joe Louis Arena Box Office