

How can we tell it's officially spring?

By Raymond E. Bullock
special writer

SPRING officially arrives for the northern hemisphere at 4:30 a.m. Sunday, March 20. The "official" start of spring often puzzles people. What determines the precise moment?

The answer is the position of the sun with respect to a line called the celestial equator.

The earth's equator is a line that divides our planet into northern and southern hemispheres. When this equator line is extended out into space, it's called the celestial equator, and it divides the sky into two hemispheres as well.

EARTH ORBITS the sun, but our planet's axis is tilted 23.5 degrees so the sun may appear as much as 23.5 degrees above or 23.5 degrees below the celestial equator.

In June the sun is at its highest above the equator, because the earth's northern hemisphere is tilted its most toward the sun, and we have summer. In December the sun is at its lowest point and we have winter. Obviously there are two points where the sun's pathway crosses the celestial equator.

Michigan college students can compete for \$1,000 prize money in an essay contest sponsored by the Detroit Chapter of Women in Communications. The group is celebrating its 50th anniversary.

Essays on "what will communications be like in the 21st century" are to be 750 words or less in length. They will be judged on originality, creativity and grammar by a panel of area writers and editors.

To obtain an entry form or for more information, call 572-5352 or 499-4972, or write Student Essay Contest, 10816 W. Warren, Dearborn, MI 48126.

Entries must be postmarked by April 22 and must be accompanied by an entry form. The winner will be notified June 8.

skywatch

When the sun is traveling from its low point toward its high point, it crosses the celestial equator moving from south to north. The precise moment the sun crosses that line is the official start of spring.

THE POINT of crossing has a special name — vernal equinox. Vernal is the Latin word for spring, and equinox means "equal night."

The length of the day is nearly equal to the length of night during this time. On the vernal equinox, the sun rises due east and sets due west.

We are rather shortsighted in calling it the "vernal" equinox. We may be starting spring in the northern hemisphere, but the people below the equator are starting autumn.

Watch the crescent moon pass Jupiter and Venus starting the evening of March 19. The moon is below and to the right of Jupiter.

ON THE 20TH the moon is nearly between Jupiter and Venus (which are 14 degrees from each other).

On the 21st the moon is located above Venus and below the Pleiades (PLEE-a-dees), the "shoulder" of Taurus the bull.

The Pleiades is a beautiful, open star cluster, well worth observing with binoculars or a low-power telescope. ("Open" star clusters are stars that are grouped together loosely.)

The moon is above and slightly to the left of the Pleiades on the evening of the 22nd. To the left of the moon is Aldebaran (al-DEB-a-ran), the "eye" of Taurus. Aldebaran also marks the upper-left end of a V-shaped group of stars. This is the Hyades (HIGG-a-dees), another open star cluster.

FIRST QUARTER Moon is at 11:41 a.m. on March 24. The moon is

one-quarter of its way around the earth.

The moon is in the constellation Gemini on the evening of the March 25, forming a triangle with the stars Castor and Pollux. Castor is at the top of the triangle, and Pollux is at the lower left.

Each star marks one of the heads

of the "twins." On the next night the three objects form a straight line.

The moon is above Regulus again on the evening of the 28th, and is below and to the left of Regulus on the next evening.

Venus and Jupiter are 23 degrees apart on the evening of the 31st. Venus is only three degrees below the

Pleiades star cluster.

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 and is available from Abrams Planetarium, Michigan State University, East Lansing, 48824.

HOME BUILDER'S SHOW

SPA SPECIAL

As featured at the Home Builder's Show

SAVE \$2000
Hot Spring's deluxe Indoor/Outdoor Spa-for-5
Plus a custom-designed redwood gazebo, complete with quality extras
Offer good now through March 27th



Don't wait 'til the show opens to see this beauty! Stop by one of our three showrooms and take advantage of our Anniversary special before the show starts! This is a very limited edition, so hurry to your nearest California Comfort.

Of course, you get our exclusive Moto-Massage jets... enjoy as they actually glide up and down your back!

California Comfort Spa & Sauna Co.
Since 1978

BEST BUY Hot Spring is #1 According to Consumer Digest

1230 Walton Blvd. (Great Oaks Mall) • Rochester, MI 48063 • 313-651-0808
29504 Northwestern Hwy. (Sunset Strip) • Southfield, MI 48034 • 313-358-1000
4765 Jackson Rd. (Off I-94) Ann Arbor, MI 48104 • 313-996-0696


SEE THE HOT SPRING DISPLAY RIGHT AT THE SHOW STARTING MARCH 19th

YOU ARE INVITED TO

CHILDREN'S DAY

AT ST. JOSEPH MERCY HOSPITAL

COMMITMENT TO CARING



CHILDREN AND HOSPITALS WEEK

Prizes galore - tricycle, bike, car seat and much more
Clowns, refreshments and puppet show
Free fingerprinting and videotaping services by Michigan Association of Police
Kids can learn what it's like to be a patient in the hospital
Tour the hospital, an ambulance and fire truck
Free health care information
A day of fun and learning for kids and their parents.

SATURDAY MARCH 19, 1988
11 AM - 3 PM

ST. JOSEPH MERCY HOSPITAL
100 WOODWARD, FORT LEE, NJ 07024

FREE COUNSELING FOR SMALL BUSINESS


477 Michigan Ave. (313) 226-7947
Detroit, Mich. 48226

SCORE
SERVICE CORPS OF RETIRED EXECUTIVES
Sponsored by U.S. Small Business Administration

Together, we can change things.

AMERICAN RED CROSS





2nd Annual Greater Livonia Expo


May 10-12, 1988

presented by the
Livonia Chamber of Commerce
at Schoolcraft College
18600 Haggerty Rd., Livonia

FEATURING:
• Show Preview and Cocktail Party
• Financing for Business Expansion Seminar
• "Dress for Success" Fashions
• Small Business Person of the Year Awards
• Five O'Clock Connection

FOR INFORMATION AND EXHIBIT SPACE
CALL (313) 478-3187

For Ticket Information
(313) 427-2122



With all due modesty, Dr. Letzer proclaims he has just filled the gap in the cost and care of dental braces:

0% down 0% financing

(And you can still save \$1,000!)

We're sort of hoping you don't think this is another automobile ad and fall asleep on us.

The two big 0's you see above really mean something to the you and yours that need braces for their teeth. It means you've just lost your last reason for waiting. It means that you and yours still get complete orthodontic care, consultation, braces, retainers, the works, from the professional, reliable orthodontists at UTC. It means you can still save about \$1,000 compared to average orthodontic fees.

It means what it says, nothing down, and no repeat no finance charges. So, c'mon, call the good doctor, right now. As we've often said, we want the whole world to have a beautiful smile. Now it's your turn. And remember, that beautiful smile will last a lifetime.

Now you know this is not a car ad.

Orthodontic Treatment Center
Professional, Reliable, Affordable
Specialists 399-3456

Offices in Southfield, Ann Arbor, Dearborn, Lincoln Park, Livonia, Detroit, Madison Heights, Rochester, Taylor, Troy, Westland and Roseville. In Flint call 732-6511. Evening and Saturday Appointments Available. Gerald M. Letzer, D.D.S., M.D.S., Director
New Waterford Twp. Office, 2651 Elizabeth Lake Rd., Opens March 15th.

Our doctors are members of American Association of Orthodontists and American Dental Association.