



**Longmont Astronomy Society Newsletter
February 2007**

This Month's picture: is for me to know, and you to guess at! First email to editor@longmontastro.org with the right answer gets their choice from the book collection at the March meeting.

Maximum three guesses / person allowed, so use your guesses wisely.

From the President:

Hello Astronomers, This past month has been the slowest month of the year as far as clear skies goes. The mostly cloudy conditions has kept us from doing our once a month Dark sky adventures to Pawnee. Spring will return soon and maybe I will have something to write about.

The Home Planet views will return to normal. We have gotten some yard views in, especially with Saturn, (it's in opposition in February). Saturn is worth chasing down. Easy to find: comes up before dark and stays up all night. I tried with digital camera to get some quick shots in, but mostly poor seeing for picture taking.

Alan Stern, who did the LAS Banquet talk about Pluto & Charon mission, in January. Pluto was discovered by Clyde Tombaugh February 18th, 1930 at Lowell observatory in Flagstaff Arizona, in case you forgot. I still see it as a planet, no dwarf planet mentality here! Do not forget February 14th, Valentine's day for your honey or we will be watching the stars in the dark alone. Other facts, the brightest supernova seen from Earth in 383 years was on February 23rd in the Large Magellanic cloud . February 3rd, 1966 the Soviets landed first moon probe to take pictures of Lunar surface. February 12th 2001 Near-Shoemaker lands on Eros, first spacecraft to orbit and land on an asteroid. February 7th American Astronauts McCandless and Robert Steward make first untethered spacewalk on space Shuttle Challenger mission. February 24th 1968. Cambridge University astronomers announce discovery of Pulsars. I got all these facts from the Astronomy 2007 calendar. Good calendar for listing some astronomy facts and info, sure most of you already got a calendar from Vern.

Vern has been sending out weekly updates on what's up for the week, very nice Vern . I enjoy reading them and it has inspired me to take some looks in yard. Yard views are OK with me, but we are Dark sky observers, so can not wait till our next adventure to the grasslands again. Maybe next new moon Feb 17th weekend after the LAS meeting. I will send off an e mail if we get to go anywhere .

FRCC college new astronomy teacher, Joe Flasher, wants a hands on observing night in March. I will be sending out notices for Volunteers to help me out in yard here in Niwot .

We have an obligation to put on several of these thru out the year for FRCC people. I have not set date in stone yet, waiting once again until it gets closer to the date so we can maybe pick a clear night, Monday 8 to 10 PM then use Wednesday night as alternate date if cloudy. Boulder County Day school cancelled the last minute because of too much snow still on ground plus unseasonably cold weather makes it hard to get a good turn out of people and scopes.

We (LAS) are still looking for a person to take over tee shirt sales at LAS meetings, fund raising, etc. If you care to help out let me know or other executives in club. Easy job, need help to keep sales going for club monies. LAS is going strong and our public outreach will return with the warmer weather. Thanks Mark Wiley, for helping with mailing lists for public star parties, like BCD School event. Sorry it was cancelled.

Brian Kimball and Vern Raben still inspire the rest of us with their great astro photos, keep them coming and anybody else who has something to share please feel free to send info , pictures etc to me or Birch, newsletter editor. Thanks Birch, keep the newsletter going, we appreciate your work, thanks, See you guys in the dark soon maybe?? Always looking up, bye, Gary

From the Treasurer:

The new moon is next Sunday, the 18th, at 9:01 PM. That means this week iwill be a good time to view faint nebulas and galaxies. Hopefully the weather forecasts are wrong and we will get some clear sky this week!

The showpiece galaxies in Ursa Major, Messier 81 and Messier 82, are in good position for viewing around 9 pm or so. M81 is a splendid grand design spiral galaxy which can be easily found with small scopes and binoculars. A scope larger than 8 inch will show some of the spiral structure. The view of this galaxy through Gary's 30 in dark place is simply stunning! Its neighbor 38 arc minutes to the north, Messier 82, is an irregular galaxy which we view edge-on. Scopes 8 inches or larger so show a dark lane which nearly bisects the the halo. In larger scopes, bright knots can be seen along axis of the cigar shape.

Comet 4P Faye is currently in constellation Taurus. It is estimated to be at mag 12.1 and has a 1.6 arc-min coma, so it should be within range of a 10 inch or larger scope. Look in early evening around 7pm.

The last chance for a while to see Mercury is this week. Look for it low in the southwest around 6:30 pm.

Saturn was at opposition yesterday. It is in prime position for viewing for many weeks to come. Here is an image from last night through my Nexstar11. Conditions weren't great with hazy air and only fair (5/10) turbulence. Image a bit fuzzy, but my best thus far this year.

In the sky this month:

Meteor Showers – seems to be a shortage of major showers...

Planets

Mercury

As these things go, Mercury is reasonably well-placed for observing early this month, reaching greatest eastern elongation on the 7th. Look for it a few degrees below Venus in the evening western twilight. After the first 10 days to two weeks of the month, Mercury has inched back too close the Sun to be seen, and passes between the Earth and Sun in inferior conjunction on the 23rd. It returns to the morning sky in early March.

Venus

Venus rules! Look for it, fairly low in the west and very bright, well before full night. Look quick, though, because it sets within a couple of hours of the Sun..

Mars

Mars is near the border of Sagittarius and Capricornus, moving into the latter on the 25th. It is low in the southeast and not particularly well-placed for observing this month.

Jupiter

Although not at its absolute best, Jupiter is still quite impressive, rising in the southeast for Northern Hemisphere observers an hour or two after midnight. By dawn it is well up in the south not far from Antares in Scorpius.

Saturn

At opposition to the Sun on the 10th, Saturn rules the night after Venus sets and before Jupiter rises. A small telescope is needed to appreciate the rings. Even a good pair of binoculars can reveal the rings, although often they simply make Saturn appear to be an oblong or football (American) shaped planet. Early astronomers sometimes described Saturn as having two small companions on either side, and in some cases as "handles" like those on a teacup. Look for Saturn near Regulus in Leo, the Lion.

Interesting and Newsworthy:

Saturday, 03/03

Total Lunar Eclipse, 5:44 p.m. (beginning of totality)

This lunar eclipse is visible in part from all of North America except Alaska, and parts of the Yukon and British Columbia. It is not visible from Hawaii. Observers east of a line from approximately the New Mexico-Arizona border northward through western Montana and central Alberta can observe at least some part of totality (which ends at 8:11 p.m. EST); Observers to the west of that line can see only a partial eclipse as the Moon rises. The time of maximum eclipse is 6:21 p.m. EST. Totality is already in progress at moonrise for all of North America except for Prince Edward Island and extreme eastern Newfoundland and Labrador. The partial phase is over at 9:24 p.m. EST. (For more information, see this article: [eclipse](#).)

Good month to use the Moon as a signpost to the planets. The Moon is pretty much on the ecliptic this month, and passes all the planets.

3/1 Moon 1.1° to the North of Saturn

3/15 Moon is 1.9° to the South of Mars

3/16 Moon is 1.4° South of Mercury

3/21 Moon is 4° North of Venus

On 3/22, Moon is in the Pleiades (always a good sight), and Mercury is at 27.7 degrees elongation, about as good as it ever gets.

On March 20th, the vernal equinox takes place at 6:07 MDT – this is the last time the vernal equinox will take place on the 21st of March in this century (Greenwich time, you know) due to that 400 year calendar problem. The skipped leap day in 2100 will fix that and put the equinox back on the 21st.

Club Calendar:

Feb: New Moon: 17th - Pawnee
1st qtr: 24th – Flanders Park
Meeting: 15th – Topics: Vern Raben will teach us all about
astrophotography.

Mar: New Moon: 17th - Pawnee
1st qtr 24th – Flanders Park
Meeting: 15th –Topics – Frank Vacanti and time lapse pics of
moon and sun.

Astronomy anniversaries:

2/20: Friendship 7 with John Glenn aboard is launched in 1962.

2/25: Luna 20 returns samples to Earth, but we never knew it because it was a Commie mission in 1972.

2/28: The New Horizons mission will flyby Jupiter, testing its cameras and sending nice pictures back (hopefully). Next stop: Pluto!

3/1: Venera 13 flyby and landing on Venus in 1982.

3/2: Pioneer 10 is launched in 1972, last mission to take pictures of Mercury closeup.

3/5: Venera 14 flyby and landing on Venus in 1982.

3/8: Uranus is found to have rings! 1977.

3/10: Mars Reconnaissance Orbiter orbital insertion, 2006.

Internet Resources:

A brief mention in the Denver Post of the “perfect time to observe the Winter Circle” led to a Huh? Moment on my part. A 5 minute web search led to the answer at <http://www.earthsky.org/skywatching/50894/2007-0108> and an additional view <http://ourworld.compuserve.com/homepages/bmoler/wintercr.htm> The Winter Circle turns out to be Aldebaran, Sirius, Procyon, Castor/Pollux, Capella – all of which form a circle of bright stars around the constellation Orion (everyone’s favorite, since you can find it no sweat...). The second source above includes Rigel in the circle.

This month’s field trip:

You can visit the telescopes at Kitt Peak without too much difficulty. Kitt Peak offers visitors [daily guided tours](#) lead by qualified docents at 10 AM, 11:30 AM and 1:30 PM. You may conduct your own self-guided tour anytime between the regular business hours of 9:00 AM to 4:00 PM. There are three major telescopes available for visitation: the [4-Meter Mayall](#), the [2.1-Meter](#), and the largest solar telescope in the world, the [McMath-Pierce](#), each with a viewing gallery from which you can see the telescope. Group tours and school tours are available with advance reservations by calling (520) 318-8732. Suggested donations are \$2/head, and there is a gift shop which doesn’t have much. Kitt Peak is about 50 miles from Tucson and the road up the mountain is pretty good.

You can take a virtual tour for free at <http://www.noao.edu/outreach/kptour/>