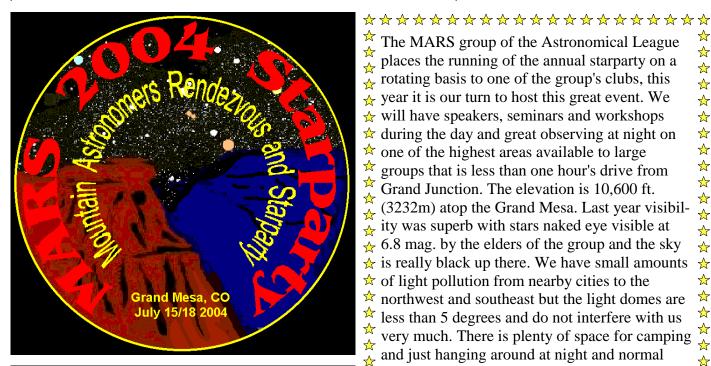
# The Denver Observer

May, 2004



Hosted By The Western Colorado Astronomy Club And The Denver Astronomical Society

☆ The MARS group of the Astronomical League ☆  $\stackrel{\sim}{\underset{\scriptstyle}{\overset{\scriptstyle}{\overset{\scriptstyle}{\overset{\scriptstyle}}}}}$  places the running of the annual starparty on a ☆  $\frac{1}{\sqrt{2}}$  rotating basis to one of the group's clubs, this ☆ ★ year it is our turn to host this great event. We ☆  $\bigstar$  will have speakers, seminars and workshops ☆  $\bigstar$  during the day and great observing at night on ☆ ☆ 🖈 one of the highest areas available to large ☆  $\stackrel{\bigstar}{\leftarrow}$  groups that is less than one hour's drive from ☆ Grand Junction. The elevation is 10,600 ft. ☆  $\frac{1}{2}$ (3232m) atop the Grand Mesa. Last year visibil-☆ 🗼 ity was superb with stars naked eye visible at ☆  $\bigstar$  6.8 mag. by the elders of the group and the sky ☆  $\bigstar$  is really black up there. We have small amounts ☆  $\bigstar$  of light pollution from nearby cities to the ☆ ☆  $\bigstar$  northwest and southeast but the light domes are ☆  $\stackrel{\bigstar}{\sim}$  less than 5 degrees and do not interfere with us ☆ very much. There is plenty of space for camping ☆ and just hanging around at night and normal ☆ ☆ starparty etiquette is encouraged. Come share ☆  $\bigstar$  the night sky with the MARS group, this is an ☆  $\bigstar$  event you will not want to miss. ☆ ☆ 🖈 Carlo Godel http://www.coloradowestastronomy.org/ ☆ ☆ ☆

SP04.html  $\stackrel{\sim}{\underset{\leftarrow}{\rightarrow}} Registration form is on page 3$ 

 $\frac{1}{2}$ \*\*\*\*



# Desert Sunset Star Party - May 13-16, 2004

☆

The 2004 Desert Sunset Star Party will be held at the Caballo LocoRanch, about 11.5 miles south of Three Points, AZ, on Rt. 286, and then east for 8 miles. This RV ranch is in a secluded area of Arizona with dark skies. The telescopes of Kitt Peak are in clear view to the west.

The DSSP begins on Thursday night and runs through Saturday night. We will have a speaker on both Friday and Saturday evenings along with door prize giveaways. Registration information will be posted on the **DSSP** website:

http://chartmarker.tripod.com/sunset.htm

Pat and Arleen Heimann http://chartmarker.tripod.com

# **President's Corner**



A hearty "Welcome Back" to all those observers who've been ensconced by the fireplace for the past 6 months. Spring is finally here, despite the minor flaking taking place, and what better time of year to come out of hibernation, particularly if galaxies are your thing. Tucked between the tail of Leo and the

reclining arm of the Virgin is a feast of spirals, ellipticals and irregulars, enough to keep you busy 'til the wee hours for many nights -- dig in.

Onward with the business at hand. We've several schools and community center star parties coming up and we certainly need telescopes and their owners to attend. This is a wonderful way to "break the ice" of becoming involved with the Society in a hands-on fashion -- taking our good work out to the public. If you'd like to lend a hand, let me know and I'll put your name in the corral of DAS scope folk.

A bit of concern regarding the listserve arose this past month. As is always the case with policy, a few items need reconsidering and updating, which the E-Board will address next meeting. It is periodically necessary to "clean the glass" so that clarity is restored. For the present, however, it's important to remember that the promotion of and education in astronomy is the principle around which the Society was formed and continues to exist. These are exciting and thought-provoking times and adherence to fundamentals must remain a priority or we dissolve . . .news at 11.

In the mean time, observe, photograph and enjoy the skies. If you've a thought or image to share, by all means send away to Pat Ryan for publication in our wonderful newsletter. There are 360 voices in the DAS and we'd like to expand whom we hear from.

Steve Solon

The speaker for May 7th will be Jeff Vancleve from Ball Aerospace. His topic will be '' The Spitzer Space Telescope'' (formerly SIRTF).

- 🔘 — **( SCHEDULE** May 7 General Meeting at Olin Hall, rm 105, DU, beginning at 7:30. The speaker is Jeff Vancleve from Ball Aerospace. Topic is; "The Spitzer Space Tele ) scope" (formerly SIRTF). 13-16 Desert Sunset Star Party; see page 6 15-16 Dark Sky Site Weekend 16-23 Texas Star Party 21 8:00 PM E- Board meeting, Chamberlin Observatory 28-30 RTMC 29 Open House, 7:30 pm, Chamberlin Observatory June 11 8:00 PM E- Board meeting, Chamberlin Observatory 17-20 **RMSS** See pages 3-6 19-20 Dark Sky Site Weekend General Meeting at Olin Hall, rm 105, 25 DU, beginning at 7:30. 26 Open House, 7:30 pm, Chamberlin Observatory -0--0--0--0-

The DAS 2nd quarter participation prize is the <u>Astronomy Encyclopedia</u> by Oxford Press.

Frank T. Mancini, V.P.

#### MAY (Maius) SKIES 2004 <u>Ron Mickle</u>

With regard to Venus, little has changed as the month begins. It continues to be visible more than 3½ hours after sunset. However, by mid-month it will be visible for only 2½ hours after sunset and by the end of May, only one hour after sunset. Venus will also be decreasing in apparent magnitude from its brightest of -4.5. One of the more outstanding things to look at for telescopic viewers will be the thin crescent of Venus as it goes through it phases. By the end of May, Venus will be less than 10% illuminated, but over 50



# ROCKY MOUNTAIN STAR STARE JUNE 17-20, 2004

For almost two decades, astronomers from across

the U.S. and around the world have been gathering each summer in the mountains above Colorado Springs. What mysterious power draws them here each year? What secret treasure awaits those that make this annual pilgrimage? At last, the truth can be revealed. These gazers of the stars are enjoying Rocky Mountain Star Stare! Held each June in Pikes National Forest, RMSS is one of this nation's premier star parties each and every year. Average attendance is over 300 astronomers, and the popularity of this event made it the focal point of the movie "Star Party".

The Colorado Springs Astronomical Society sponsors this amazing gathering of amateur astronomers. This year's event will be held from June 17th through June 20th high up in the Colorado Rockies at 8817 feet! Incredible fields of stars by night are supplemented with workshops, children's activities, door prizes, catered meals and fun for everyone. Preregistration for this 4-day event is only \$10.00 per adult and \$4.00 per child making RMSS one of the least expensive star parties in the nation! (Please see pages 4-6!!)

# <u>RMSS 2004 Registration Info</u> \*IMPORTANT\*

You will need to go to the following web address to fill out the registration form for RMSS: http://www.csastro.org/rmss/registration.htm

This is NOT an online registration where you can submit a credit card payment to pay for this event. You will display this form on the screen, type in your info, and then print it and mail it to the address shown on the form, with your payment. This is the only way to insure that everything (from whether or not you're bringing pets to registering for the meals) is filled out correctly and that all necessary information is displayed. Do remember that the pre-registration price is only good if you have your registration <u>postmarked</u> on or before May 20th.

## **Pre-registration Prices**

(from now until May 20, 2004) Adults, \$10.00 Children (ages 6-17), \$4.00

#### **Regular Registration Prices**

(after May 20, 2004 and on-site) Adults, \$15.00 Children (ages 6-17), \$5.00 **Registration forms postmarked on or before Thursday, May 20, 2004 will qualify for the preregistration pricing.** Any registrations postmarked after May 20 will be at regular pricing. CSAS is not responsible for inclement weather conditions. All registration fees are NON-refundable.

**Please check-in at the Registration desk upon arrival at the site.** If Registration is closed feel free to set up camp and register later.

Your **food vouchers for the Friday and Saturday Meals** will be included in your Registration Kit when you check-in, as will door prize tickets and nametags.

**Preordered merchandise** will be available at the site, extra merchandise will available on-site in limited quantities.

# <u>RMSS Schedule</u>

TIMEEVENTFURSDAY JUNE 17, 2004Events TBA12PM - 7PM*Registration / Merchandise Sales6:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffFRIDAY JUNE 18, 2004Events TBA3:38 AMStart of Astronomical Dawn3:50 AMMoonrise5:38 AMSunrise11AM - 8PM*Registration / Merchandise SalesNoonGenerators May Be On5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical Twilight2:39 AMStart of Astronomical Dawn3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be On4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATTM Valkabout5:30 PMDinner8:32 PMSunset1:031 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA<			
Events TBA12PM - 7PM*Registration / Merchandise Sales6:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TWilightMidnightGenerators OffFRIDAY JUNE 18, 2004Events TBA3:38 AMStart of Astronomical Dawn3:50 AMMoonrise5:38 AMSunrise11AM - 8PM*Registration / Merchandise SalesNoonGenerators May Be On5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TWilight10:31 PMEnd of Astronomical Dawn3:39 AMStart of Astronomical Dawn3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be On4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATIM Walkabout5:30 PMDinner Moonset8:32 PMSunset10:31 PMEnd of Astronomical TWilightMidnightGenerators OffUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical TWilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astro	TIME		7 2004
12PM - 7PM*Registration / Merchandise Sales6:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffFRIDAY JUNE 18, 2004Events TBA3:38 AMStart of Astronomical Dawn3:50 AMMoonrise5:38 AMStart of Astronomical Dawn3:50 AMMoonrise5:38 AMSunrise11AM - 8PM*Registration / Merchandise SalesNoonGenerators May Be On5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightEvents TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be On4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATIM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AM <td></td> <td></td> <td>1,2004</td>			1,2004
Merchandise Sales6:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffFRIDAY JUNE 18, 2004Events TBA3:38 AMStart of Astronomical Dawn3:50 AMMoonrise5:38 AMSunrise11AM - 8PM*Registration / Merchandise SalesNoonGenerators May Be On5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightAstrut of Astronomical Twilight3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be On4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATIM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical TwilightSian of Astronomical Dawn <td>12PM - 7PM*</td> <td></td> <td></td>	12PM - 7PM*		
8:32 PM End of Astronomical Twilight Midnight Generators Off FRIDAY JUNE 18, 2004 Events TBA 3:38 AM Start of Astronomical Dawn 3:50 AM Moonrise 5:38 AM Sunrise 11AM - 8PM* Registration / Merchandise Sales Noon Generators May Be On 5:30 PM Dinner 7:04 PM Moonset 8:32 PM Sunset 10:31 PM End of Astronomical Twilight CURDAY JUNE 19, 2004 Events TBA 3:39 AM Start of Astronomical Dawn 4:29 AM Moonrise 5:38 AM Sunrise 11AM - 6PM* Registration / Merchandise Sales Noon Generators May Be On 5:30 PM Dinner 7:04 PM Moonset 8:32 PM Sunset 10:31 PM End of Astronomical Dawn 4:29 AM Moonrise 5:38 AM Sunrise 11AM - 6PM* Registration / Merchandise Sales Noon Generators May Be On Noon Swap Meet 1:00 PM ATIM Walkabout 5:30 PM Dinner 8:04 PM Moonset 8:32 PM Sunset 1:031 PM End of Astronomical Twilight Midnight Generators Off SUNDAY JUNE 20, 2004 Events TBA 3:39 AM Start of Astronomical Twilight Midnight Generators Off		5	
8:32 PM End of Astronomical Twilight Midnight Generators Off FRIDAY JUNE 18, 2004 Events TBA 3:38 AM Start of Astronomical Dawn 3:50 AM Moonrise 5:38 AM Sunrise 11AM - 8PM* Registration / Merchandise Sales Noon Generators May Be On 5:30 PM Dinner 7:04 PM Moonset 8:32 PM Sunset 10:31 PM End of Astronomical Twilight CURDAY JUNE 19, 2004 Events TBA 3:39 AM Start of Astronomical Dawn 4:29 AM Moonrise 5:38 AM Sunrise 11AM - 6PM* Registration / Merchandise Sales Noon Generators May Be On 5:30 PM Dinner 7:04 PM Moonset 8:32 PM Sunset 10:31 PM End of Astronomical Dawn 4:29 AM Moonrise 5:38 AM Sunrise 11AM - 6PM* Registration / Merchandise Sales Noon Generators May Be On Noon Swap Meet 1:00 PM ATIM Walkabout 5:30 PM Dinner 8:04 PM Moonset 8:32 PM Sunset 1:031 PM End of Astronomical Twilight Midnight Generators Off SUNDAY JUNE 20, 2004 Events TBA 3:39 AM Start of Astronomical Twilight Midnight Generators Off		Magnet	
10:31 PM End of Astronomical Twilight Midnight Generators Off FRIDAY JUNE 18, 2004 Events TBA 3:38 AM Start of Astronomical Dawn 3:50 AM Moonrise 5:38 AM Sunrise 11AM - 8PM Registration / Merchandise Sales Noon Generators May Be On 5:30 PM Dinner 7:04 PM Moonset 8:32 PM Sunset 10:31 PM End of Astronomical Twilight <b>SATURDAY JUNE 19, 2004</b> Events TBA 3:39 AM Start of Astronomical Dawn 4:29 AM Moonrise 5:38 AM Sunrise 11AM - 6PM Registration / Merchandise Sales Noon Generators May Be On 5:30 PM Dinner 5:38 AM Sunrise 11AM - 6PM Registration / Merchandise Sales Noon Generators May Be On Noon Swap Meet 1:00 PM ATTM Walkabout 5:30 PM Dinner 8:04 PM Moonset 8:32 PM Sunset 10:31 PM End of Astronomical Twilight Midnight Generators Off SUNDAY JUNE 20, 2004 Events TBA 3:39 AM Start of Astronomical Twilight			
TwilightMidnightGenerators OffFRIDAY JUNE 18, 2004Events TBA3:38 AMStart of Astronomical Dawn3:50 AMMoonrise5:38 AMSunrise11AM - 8PM*Registration / Merchandise SalesNoonGenerators May Be On5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightEvents TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be On4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be On11AM - 6PM*Registration / Merchandise SalesNoonSwap Meet1:00 PMATIM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffUnilationEvents TBA3:39 AMStart of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical TwilightMidnightGenerators OffSundayStart of Astronomical Dawn5:16 AMMoonrise			
MidnightGenerators OffFRIDAY JUNE 18, 2004Events TBA3:38 AMStart of Astronomical Dawn3:50 AMMoonrise5:38 AMSunrise11AM - 8PMRegistration / Merchandise SalesNoonGenerators May Be On5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightEvents TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be On4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnSign PMDinner5:30 PMDinner8:04 PMMoonset8:32 PMSunset1:00 PMATTM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	10.5117		
FRIDAY JUNE 18, 2004Events TBA3:38 AMStart of Astronomical Dawn3:50 AMMoonrise5:38 AMSunrise11AM - 8PM*Registration / Merchandise SalesNoonGenerators May Be On5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightSATURDAY JUNE 19, 2004Events TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be On4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATTM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffUnidightGenerators OffSi39 AMStart of Astronomical Twilight3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	Midnight		
Events TBA3:38 AMStart of Astronomical Dawn3:50 AMMoonrise5:38 AMSunrise11AM - 8PM*Registration / Merchandise SalesNoonGenerators May Be On5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightATURDAY JUNE 19, 2004Events TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be On4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATTM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	5	FRIDAY JUNE 18	2004
Dawn3:50 AMMoonrise5:38 AMSunrise11AM - 8PM*Registration / Merchandise SalesNoonGenerators May Be On5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightTWIGHT3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonGenerators May Be OnNoonSwap Meet1:00 PMATIM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical Twilight5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise			
5:38 AMSunrise11AM - 8PM*Registration / Merchandise SalesNoonGenerators May Be On5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightTwilightSATURDAY JUNE 19, 2004Events TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATIM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical TwilightSian AMStart of Astronomical Dawn5:16 AMMoonrise	3:38 AM		
5:38 AMSunrise11AM - 8PM*Registration / Merchandise SalesNoonGenerators May Be On5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightTwilightSATURDAY JUNE 19, 2004Events TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATIM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical TwilightSian AMStart of Astronomical Dawn5:16 AMMoonrise	3:50 AM	Moonrise	
Merchandise SalesNoonGenerators May Be On5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightTwilightSATURDAY JUNE 19, 2004Events TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATIM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise		Sunrise	
NoonGenerators May Be On5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightSATURDAY JUNE 19, 2004Events TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATIM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 20045:30 AMStart of Astronomical Twilight3:39 AMStart of Astronomical Dawn5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	11AM - 8PM*	Registration /	
5:30 PMDinner7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightSATURDAY JUNE 19, 2004Events TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical Twilight5:16 AMMoonrise		Merchandise Sales	
7:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightSATURDAY JUNE 19, 2004Events TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATTM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	Noon	Generators May Be On	
8:32 PM Sunset 10:31 PM End of Astronomical Twilight SATURDAY JUNE 19, 2004 Events TBA 3:39 AM Start of Astronomical Dawn 4:29 AM Moonrise 5:38 AM Sunrise 11AM - 6PM* Registration / Merchandise Sales Noon Generators May Be On Noon Swap Meet 1:00 PM ATIM Walkabout 5:30 PM Dinner 8:04 PM Moonset 8:32 PM Sunset 10:31 PM End of Astronomical Twilight Midnight Generators Off SUNDAY JUNE 20, 2004 Events TBA 3:39 AM Start of Astronomical Dawn 5:16 AM Moonrise	5:30 PM	Dinner	
10:31 PMEnd of Astronomical TwilightSATURDAY JUNE 19, 2004Events TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSunDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	7:04 PM	Moonset	
TwilightTwilightSATURDAY JUNE 19, 2004Events TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	8:32 PM	Sunset	
Events TBA3:39 AMStart of Astronomical Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATTM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffEvents TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	10:31 PM		
3:39 AM Start of Astronomical Dawn 4:29 AM Moonrise 5:38 AM Sunrise 11AM - 6PM* Registration / Merchandise Sales Noon Generators May Be On Noon Swap Meet 1:00 PM <u>ATIM Walkabout</u> 5:30 PM Dinner 8:04 PM Moonset 8:32 PM Sunset 10:31 PM End of Astronomical Twilight Midnight Generators Off <u>SUNDAY JUNE 20, 2004</u> Events TBA 3:39 AM Start of Astronomical Dawn 5:16 AM Moonrise		SATURDAY JUNE 1	9, 2004
Dawn4:29 AMMoonrise5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonGenerators May Be OnNoonSwap Meet1:00 PMATTM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffEvents TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise		Events TBA	
5:38 AMSunrise11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffEvents TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	3:39 AM		
11AM - 6PM*Registration / Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATIM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffEvents TBA 3:39 AM5:16 AMMoonrise	4:29 AM	Moonrise	
Merchandise SalesNoonGenerators May Be OnNoonSwap Meet1:00 PMATM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffEvents TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	5:38 AM	Sunrise	
NoonSwap Meet1:00 PMATM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffEvents TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	11AM - 6PM*	-	
1:00 PMATM Walkabout5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffEvents TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	Noon	Generators May Be On	
5:30 PMDinner8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffEVents TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	Noon	Swap Meet	
8:04 PMMoonset8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	1:00 PM	ATM Walkabout	
8:32 PMSunset10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	5:30 PM	Dinner	
10:31 PMEnd of Astronomical TwilightMidnightGenerators OffSUNDAY JUNE 20, 2004Events TBA3:39 AMStart of Astronomical Dawn5:16 AMMoonrise	8:04 PM	Moonset	
Twilight       Midnight     Generators Off       SUNDAY JUNE 20, 2004       Events TBA       3:39 AM     Start of Astronomical Dawn       5:16 AM     Moonrise	8:32 PM		
SUNDAY JUNE 20, 2004 Events TBA 3:39 AM Start of Astronomical Dawn 5:16 AM Moonrise	10:31 PM		
Events TBA 3:39 AM Start of Astronomical Dawn 5:16 AM Moonrise	Midnight	Generators Off	
3:39 AM Start of Astronomical Dawn 5:16 AM Moonrise		SUNDAY JUNE 20	, 2004
Dawn 5:16 AM Moonrise			
5:16 AM Moonrise	3:39 AM	_	
		Dawn	
5:39 AM Sunrise	5:16 AM	Moonrise	
	5:39 AM	Sunrise	

# <u>RMSS RULES</u>

Our list of "rules" is short, but important. In addition to the usual restrictions on white light after dark, and quiet time before noon each day, the Forest Service requests that all participants follow a few simple rules of their own. Please remember, this is a delicate alpine environment and practice LOW IMPACT camping techniques and follow the "leave no trace" and "pack it in, pack it out" practices. Be sure everyone in your group is familiar with this material!

# Our "Prime Directive" - No white light after dark!

Use RED filtered flashlights on the observing field. There will be red cellophane available at the registration table to cover the lens of your flashlight if needed. Please pay special attention to automobile headlights, daytime running lights, dome lights, and backup lights. TIP: Rumor has it that one "click" of emergency brake will turn off your daytime running lights - useful if you're an astronomer! All after dark arrivals MUST park in the separate roped off area. Do not drive past the "after dark parking" area with your lights on! If you need to leave before dawn, you MUST park in the "after dark parking" area.

# Please limit vehicle parking to within 100 yards from any access road.

This is to avoid impacting the alpine environment by using only the roads that currently exist. The U. S. Forest Service will only allow us to return to this site if we do not create new roads.

#### Minimize traffic and drive slowly.

To preserve the observing field and to keep dust down to a minimum, don't drive in and out of this site more than necessary and observe the speed limit of 5 mph.

#### Quiet time before noon each day.

While RV's and generators are not restricted to a "designated area", we ask that you show due consideration for your fellow astronomers. Because many of us will be observing until dawn, it is very important that the area remain quiet before noon each day. Be kind with generators near other campers, do not run them between midnight and noon each day. Interior lighting of RV's must be shielded so as to not be visible from outside.

#### No open fires.

No campfires, fireworks or model rockets allowed. This is by order of the U.S. Forest Service. Stoves,

#### however, ARE permitted.

#### Please use caution while smoking.

Be sure to extinguish your cigarettes completely and dispose of cigarette butts along with your trash. Do not drop cigarette butts on the ground. This area can be VERY dry in summer, and the risk of fire can be extreme. Also, use caution while smoking on the observing field—matches and cigarette lighters can interfere with night vision and astrophotography setups.

#### If you bring it in, take it out!

It is important that attendees practice LEAVE NO TRACE camping techniques. Dispose properly of all trash. For more information about "Leave No Trace" call 1-800-332-4100.

#### Portable rest rooms

Do not put anything into the portable rest rooms that you wouldn't flush at home - this includes trash and diapers.

#### <u>Pet Rules</u>

If you will be bringing pets to RMSS, you must be familiar with our rules on pets. While pets are not restricted to a "designated area," we ask that you show due consideration for your fellow astronomers. All pets must be either leashed or contained at all times.

#### No pets will be allowed in the dining areas or presentation/exhibition areas.

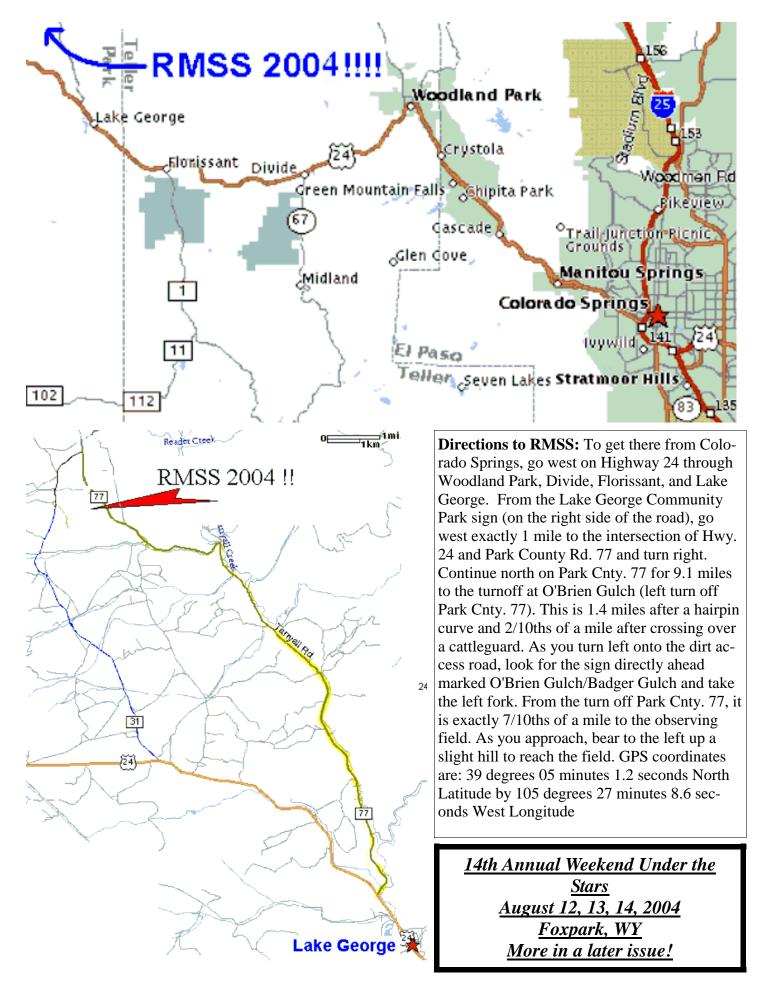
Anyone bringing a pet or pets to RMSS must immediately remove any waste or debris caused by those pets. Like all refuse, pet waste and debris must be packed out by those responsible.

Anyone bringing a pet or pets to RMSS will be responsible for those pets and all of the pets actions. Anyone bringing a pet or pets to RMSS will be responsible for ensuring that those pet(s) do not disturb, menace, or threaten other RMSS patrons by noise or action. This includes any damage or injury caused by the pet to people, property, animals (domestic and wild), or landscape.

Since RMSS is held on USFS land which is home to many predators, neither RMSS or CSAS will be responsible if any pets are lost, injured, killed, or eaten. All pet food and supplies must be stored in a manner that will not attract predators or scavengers (including insects).

Violators of any of the above rules will be subject to immediate removal from RMSS without refund of any fees. Official Service or Guide animals in working harness are exempt from the above restrictions as required by law.

These rules are to promote the enjoyment of all. Be safe, respect others, have fun!





(*Continued from page 2*) arcseconds long.

Although Mars will be visible, its  $m_{vis}$ +1.7 makes it the dimmest it can be. Look for Mars midway between Saturn and Venus. Jupiter (-2.1  $m_{vis}$ ) is still high in the sky and resumes its eastward motion on May 5.

The Eta Aquarids meteor shower will be partially obscured by the bright Moon during the first week of May.

On May 21, one hour after sunset, look for Venus, the crescent Moon, Mars and Saturn in close proximity to one another.

To get a great view of the planets, stars, and other celestial objects, visit the Denver Astronomical Society's Open House at sunset on Saturday, May 29 at the University of Denver's Historic Chamberlin Observatory. Remember that members of the Denver Astronomical Society have free access to the Clark 20" at Chamberlin Observatory during Open House.

4.....Full Moon (also called the Planting Moon or Milk Moon)

5.....Eta Aquarid meteor shower

11.....Last quarter Moon

18.....New Moon

27.....First quarter Moon

Astronomical Calendar 2004 Astronomy Magazine, May 2004

# OFFICERS AND E-BOARD of THE DENVER ASTRONOMICAL SOCIETY

The Executive Board conducts the business of the DAS at 8 pm. at Chamberlin Observatory. Please see the Schedule of Events for meeting dates. All members are welcome.

# **OFFICERS**

President Emeritus Larry Brooks President: Steve Solon (303) 932-7613 Galaxyshots@compuserve.com Vice President: Frank Mancini (303) 414-0300 Frank.mancini@lpl.com Secretary: Ron Pearson (303) 670-1299 Rpearson@ecentral.com Treasurer: Sandy Shaw (303) 234-0264 m6m7@earthlink.net

## **EXECUTIVE BOARD**

Jack EastmanWayne GreenJoe GaffordDan WrayDavid ShouldiceTed CoxRon MickleNorm RoslingALCor: (Astronomical LeagueCorrespondent)Sandy Shaw; m6m7@earthlink.net

# DAS Contact Info

DAS INFORMATION LINE: 303-871-5172

DAS CORRESPONDENCE: Denver Astronomical Society Chamberlin Observatory C/O Steve Solon 2930 East Warren Avenue Denver, Colorado 80208

VAN NATTAN SCHOLARSHIP FUND P.O. Box 150743 Lakewood, Colorado 80215-0743

WEBMISTRESS: Patti Kurtz (p\_kurtz@comcast.net) Denver Astronomical Society Website: WWW.DENVERASTROSOCIETY.ORG

Newsletter Editor: Patrick Ryan (pluto6@qwest.net)

#### About the Denver Astronomical Society

The DAS is a group of amateur and professional astronomers that share a mutual interest in the heavens. The DAS operates the University of Denver's Chamberlin Observatory, along with its prized 1894 Alvan Clark 20-inch refracting telescope. Our members have been involved with the first public planetarium at the Denver Museum of Nature and Science and the Smithsonian Astrophysics Observatory's "Moon Watch" program. The DAS successfully petitioned to have the Chamberlin Observatory listed on the National Register of Historic Places.

Our Credo is to provide members a forum for increasing and sharing their knowledge, to promote and educate the public about astronomy, and to preserve the historic telescope and observatory in cooperation with the University of Denver. To these ends we have established three tax deductible funds: the Van Nattan Scholarship Fund, the Chamberlin Restoration Fund, and the DAS Dark Sky Site Fund. This last fund was established in order to construct and maintain observing facilities near Deer Trail in eastern Colorado.

Please call our Info Line at (303) 871-5172 and drop by the General Membership meetings. Become a member and enjoy speakers, facilities, events, and our monthly newsletter, *The Denver Observer*.

Application for membership to the Denver Astronomical Society			
New Renewal			
Name:			
Address:			
City, State, Zip:			
Phone numbers: Home ( ) Work ( )			
E-mail Address:			
Occupation:			
Other Interests:			
(Associates Only) School: Grade:			
Do you want to download the newsletter in PDF format from our web-			
site instead of by postal mail?			
YesNo			
Do you want the above information excluded from the yearly roster?			
YesNo			
<u>Please Circle All That Apply:</u>			
Regular Membership: \$30 Associate: \$10 (Age 22 and younger)			
Ψ			
Astronomy Magazine/\$29			
Sky & Telescope Magazine/\$32.95 ************************************			
Ψ			
Van Nattan Scholarship Fund ************************************			
Total Amount Paid *******************************			
10tal Allount Pala			
Diagge make Dark Sky Site denotions perceble to the DAS ECKDS			
Please make Dark Sky Site donations payable to the DAS EGKDS Fund and mail to Steve Solon, 9774 W. Elmhurst Place, Littleton,			
<b>CO 80128</b> . Please make other amounts payable to the <b>Denver Astro</b> -			
<b>nomical Society</b> and mail with this completed form or a copy to:			
Sandy Shaw, DAS Treasurer, 1095 Yank Street, Golden, CO 80401			
Sundy Shaw, 2215 Heaster, 1995 Fairs Street, Golden, CO 60401			



# **Denver Astronomical Society**

C/o Chamberlin Observatory 2930 East Warren Avenue Denver, CO 80208