

DENVER OBSERVER

Newsletter of the Denver Astronomical Society

One Mile Nearer the Stars



Omega Centauri (NGC 5139) in Centaurus.
Image: © Joe Gafford 2001

Southern Delicacies

Local observers fortunate enough to experience clear skies during the spring months may be able to glimpse some of the delights of Centaurus. A beautiful sight within this southern constellation, NGC 5139 is one of the largest globular clusters in the sky. It holds more than a million stars and its apparent diameter is about the size of the full moon.

Omega Centauri is only one of the southern treats found on the menu at the Texas Star Party (TSP) outside of Ft. Davis, Texas. This year's 23rd Annual TSP will be held May 13 through 20. Folks interested in attending this dark-sky event can find out more information at the TSP website: <http://www.metronet.com/~tsp/>.

Spring into Summer Star Parties

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MAY SKIES 2001

This is **Mercury's** month. Often elusive and difficult to see because it's so close to the sun, Mercury will be showing off during its best evening views of the year. It makes a spectacular grouping among the stars of Taurus along with **Jupiter**, Aldebaran, and the Hyades. On May 15 and 16, it is less than 3° north of Jupiter. Not to be outdone, **Mars** outshines all the stars and glows with a fiery hue. As it approaches its best opposition since 1988 (this will happen June 13), it will brighten from magnitude -1 to -2. While Mars is clearly the stellar performer, **Venus** is at its brightest this month when it rises almost two hours before sunrise. By month's end, it's 3.5 hours ahead of the sun.

- 4 Venus at greatest brilliancy
- 5 Eta Aquarid meteor shower peaks
- 7 Full moon
- 15 Last quarter moon
- 23 New moon
- 29 First quarter moon
- 31 Double shadow transit on Jupiter



Left: Venus, just eight days before its March 29, 2001 inferior conjunction.
Image: ©David Shouldice, 2001



It's star party season! Nick Kurtz admires his reflection in a 36-inch telescope at RMSS on 6/29/97. Kyle Lawrence, Joe Gafford, Dave Young, and Kurt Vander Horst look on (left to right). Photo: Patti Kurtz

PRESIDENT'S CORNER

It looks like winter is finally getting out of here and spring is on the way. Warm weather brings out the observers. As you plan your summer, remember that the dark sky site is really getting to be something great.



As a member, you are invited to observe out there anytime. You do not even need a telescope,

because most members enjoy having you look through theirs. The summer camping star parties will be starting soon and are announced in this issue of *The Denver Observer* (See page 5).

We on the E-board are always looking for input from the membership. Please feel free to call or email any of us with your thoughts, questions, ideas, suggestions, complaints, or compliments. We will take it all.

If you are a new member and need some information or have questions, please feel free to contact me at Lbrooks100@aol.com or (303) 986-5255.—Larry Brooks

D.A.S. Schedule

MAY

- 4 E-Board meeting, 8 P.M.
- 18 - 19 Dark Sky Site Weekend
- 25 General Meeting at Olin Hall, D.U., 7:30 P.M.—
Speaker: Gary Emerson, Ball Aerospace, "Having Fun in Science."
- 26 Open House

JUNE

- 1 E-Board meeting, 8 P.M.
- 15 General Meeting at Olin Hall, D.U., 7:30 P.M.—
Speaker: Robert Zubin, The Mars Society
- 22 - 24 Dark Sky Site Weekend, Rocky Mountain Star Stare
- 30 Open House

Public Nights are held every Tuesday and Thursday from 7:00-9:00 P.M.

at Chamberlin Observatory

Costs to non-members are: \$2.00 adults, \$1.00 children

Please call (303) 871-3222 for reservations.

D.A. S. Officers

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The Observer is available in color PDF format from the D.A.S. website.

The Executive Board conducts the business of the D.A.S. at 8 P.M. at Chamberlin Observatory. Please see the Schedule of Events for meeting dates. All members are welcome.

www.denverastro.org



City lights at night in Continental North America (<http://spidr.ngdc.noaa.gov/biomass/usa.html>). The DMSP-OLS has the unique capability to observe faint sources of visible near-infrared emissions present at the Earth's surface, including cities, towns, villages, gas flares, and fires.

Image: Defense Meteorological Satellite Program (DMSP) Operational Linescan System (OLS).

Sky & Telescope sends only one notice before subscriptions end. The D.A.S. sends only one issue of The Denver Observer after dues expire. The cost of magazines (Astronomy and Sky & Telescope) is in addition to the annual dues. For questions concerning memberships, please contact D.A.S. Treasurer, Chuck Carlson (chcarlo@du.edu). See the back page of this newsletter for more information.

Edge-on galaxy NGC 4565 in Coma Berenices is a delightful object in a telescope. Image: © Kiowa Observatory



The Astronomical League and You

One of the oldest of the Astronomical League's benefits is the League Book Service. As one who ran this service for five years I'm very familiar with it and you should be, too. Most people's first reaction to the simple 10% discount is, "well I can do better than that with the Astronomy Book Club"—but just how much better? Well, on the whole, you will probably save, but the savings are far less than what you may think. Consider this: The Astronomy Book Club's discount is around 20-25% (up to 50% on a "bonus book"), BUT, and this is a very big "but," take a look at the "postage and handling" they add onto your order; this just about wipes out any discount. On the other hand, the League Book Service offers you a genuine 10% discount with the League paying the postage and handling.

Secondly, the Astronomy Book Club offers you a limited selection of books—if it isn't in their current catalog, you will receive no discount. The League's Book Service offers you a real 10% discount on ANY astronomy book in print.

Overseas publications are subject to availability because sometimes you can't get them over here. You can find the Book Service's address in every copy of *The Reflector* or go to prc29@aol.com on the web. Check it out when you need a new atlas or a special order.—*Jerry M. Sherlin, D.A.S. ALCor*



Note from the editor:

Newsletter contributions (ccd and film astrophotos, members with telescopes, star party candid photos, short observing anecdotes, observing and imaging tips, etc.) are welcome and encouraged. This is your chance to strut your stuff! **Please submit by the 15th of each month as follows:**

Film: Glossy prints by mail** or scanned and uploaded (high res.) to the listserve upload area.

CCD: Uploaded to the listserve upload area (resolution as high as possible, please).

Text: Articles should be no more than 250 words, please. Paste into an email and send to me at: pkurtz@starfirecreations.com.

If you don't receive a confirmation email from me, I didn't get your email. Also, be sure to let me know if you've uploaded a file. Thank you!

****Patti Kurtz (call for mailing address)**
(303) 948-5825

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Messier Marathon: Boom or Bust?

I've had a casual interest in the sky my whole life. It wasn't until two years ago that I obtained my first telescope and joined the Denver Astronomical Society to enhance my experience with astronomy.

This year I wanted to challenge myself to do the Messier Marathon. "Much learning to do," I soon discovered. To start, I copied the Messier list from Tim Geoghegan's article in the March "Observer." Using my *SkyAtlas 2000.0* I located all the Messier objects, noting right ascension, declination, object type, chart number, and constellation. I left space to record the time the object was observed.

After typing this all up in a neat format I double-checked all the coordinates I had

written out against the *SkyAtlas 2000.0 Companion* (finding about 10 mistakes!). Counting the number of constellations that the Messier objects are in (I counted 35) I then spent a few nights "naked eye" familiarizing myself with the game plan. I was getting excited and nervous not knowing if I was going to be able to complete the task at hand in one night.

Well, Nature decided to make me wait until next year. As you all know it was cloudy both nights. So, was the marathon a boom or bust? I'd definitely say boom. I'm more excited that I ever was about astronomy and with lots of studying under my belt you'll probably see me at the next star party picking away at my list! —Randy Allen

Dark Sky Committee Report

Plans for future improvements to the Dark Sky Site (D.S.S.) are being set. Following are three current priorities with their estimated time lines.

1. Build and wire additional pads: Spring and Summer 2001.
2. Vault toilet: Spring and Summer 2002.
3. Additional pads with multi-use piers: 2003.

The improvements we *are* able to, and will be able to make in the future are based on monies collected for the D.S.S. I encourage members to donate if they can. Donations of money *as well as* volunteer work are greatly appreciated.

Additionally, we'd like to hear your suggestions. What would you like to see out at the site? Please e-mail Steve Solon at Galaxyshots@compuserve.com with your thoughts about this.

M51—The beautiful Whirlpool Galaxy in Canes Venatici and its companion galaxy NGC 5194 will be the target of many telescopes and cameras as our weather warms up. Image: Steve Bell



Warming Hut Rules

- The last people on the site must turn off the lights and the heat.
- A microwave will be provided for warming food. Please clean up after yourself.
- No pots and pans, appliances, or other supplies are to be left in the shed.
- No personal supplies are to be left in the shed overnight.
- Do not donate furniture or other things unless you clear it with the D.S.S. committee first.
- No food left overnight in the shed.
- No sleeping overnight in the shed.
- Quick naps are permitted if you feel you might fall asleep on the way home. We would prefer you get your nap rather than falling asleep on the road. However, we don't want it to become a tent for camping.
- Clean up after yourself before you leave the site.
- Please clean up all food that drops or is spilled, otherwise it will attract mice and insects.

Welcome New Members!

The following folks have joined the Denver Astronomical Society since the beginning of the year. Welcome!

- William Aceves, II
- Craig Anderson
- Geoffrey B. Benedict
- Tom Bollig
- Sheryl Briles
- Jack Brozna
- Jeff Burgess
- Baylie Davis
- Don & Lynne Davis
- William Foster
- Steven Grimm
- Paul B. Kang
- Bonny Lee
- Michaelson
- Courtney Miller
- Don Morgan
- Robert O. Morris
- Lanny Mullis
- Jim Mundell
- John Rikorski
- Ken Rogge
- Jack W. Shrader
- Kenneth R. Shelby
- Lyle Smith
- Raleigh W. Souther
- Wayne & Connie Stebbins
- David Vari
- David B. Weir
- Bryan White
- Cyndi Williams
- Robert C. Wilson
- Robert Woerner

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Spring and Summer Regional Star Parties

★N.C.A.S. INVITATIONAL STAR PARTY

May 17-19 Virginia Dale, CO
<http://ncaastro.org/invite.html>

★ROCKY MOUNTAIN STAR STARE 2001 (FIFTEEN YEARS!)

June 21-24 Pike National Forest, near
Tarryall, CO

<http://www.rmss.org/rmss2001.htm>

★MONTANA STARWATCH

July 20-21 Ruby Reservoir, near
Virginia City, MT

<http://www.montana.edu/smasweb/>

★WEEKEND UNDER THE STARS

Aug. 16-18 Foxpark, WY

★GRAND MESA

Aug. 24-26

<http://www.wic.net/WCAC/>

Check the MARS region websites for details:
www.astroleague.org/allregional/mars.html.

Camp Jack Star Parties are organized by the Cheyenne Astronomical Society (C.A.S.). They're not official events, but relating get-togethers with the Cheyenne

folks. C.A.S. has reserved Camp Jack for star party weekends on the following dates:

- May 19 & 20
- Jun 22 & 23
- July 20 & 21
- Sep 14 & 15

Camp Jack (<http://commerce.state.wy.us/sphs/mcurt.htm>) charges the following fees:

Residents—\$2.00 day use fee, \$4.00 overnight camping, or \$6.00 per vehicle per day.

Non-Residents—day use \$5.00, camping \$9.00 per day per vehicle. Contact Marcy Curran with more questions at mcurran@mail.sisna.com.

D.A.S. Banquet Update

The banquet was a great success with another dynamic presentation by one of our favorite speakers, C.U.'s John Bally. (Unfortunately, a number of no-shows who made reservations resulted in a loss of nearly \$200 to the D.A.S. Consequently, the E-Board has decided that, for next year's banquet, payment in advance with reservations will be required). Thanks to all those who attended and helped make it a great success.—*Chuck Carlson*

Dark Sky Site Guidelines

The Dark Sky Site is for the use of D.A.S. members and their guests. If you are neither, please contact an officer of the D.A.S. for a "guest pass." Please remember that white light disrupts your eye's dark adaptation and can ruin astrophotography. Most members (astrophotographers may be the exception) are happy to share views from their telescopes, however, please introduce yourself and ask permission upon approaching a telescope owner. Please follow these simple guidelines to maintain a positive experience for everyone:

- ★ Try to arrive before dark. If you must arrive after dark, please turn off headlights when turning into the site, and try to arrive from the north.
- ★ Don't park on the graded graveled roads.
- ★ Turn off or disable all dome and trunk lights in your car (or cover with layered red tape or duct tape)
- ★ Use only dull RED FLASHLIGHTS.
- ★ NO OPEN FIRES. NEVER.
- ★ If you're the last person to leave, close the gate.
- ★ If you leave before everyone else, ask for assistance in getting out of the site without headlights.

Other suggestions:

- ★ Wear warm clothing.
- ★ Bring your own toilet paper in case that in the porta-pottie has run out.

S & S OPTIKA

Colorado's Premier Astronomical Supply Store
5174 So. Broadway; Englewood, CO 80110
(303) 789-1089

Hours: Tuesdays, Wednesdays, and Fridays: 10 A.M. - 6 P.M.
Thursdays: 10 A.M. - 8 P.M., Saturday: 10 A.M. - 4 P.M.

Closed Sundays and Mondays

www.sandsoptika.com

Directions to the Dark Sky Site (D.S.S.)

The D.A.S. Deer Trail Dark Sky Site is about 60 miles east of the "mouse-trap" in downtown Denver.

Take I-70 east to the Deer Trail exit (exit 328), turn left at the end of the exit ramp, and turn left again on CR 217 (after the Texaco station). Take CR 217 just over 1/2 mile, and turn right (east) onto CR 34. Stay on CR 34 about 6 miles until you get to CR 241. Turn left (north) onto CR 241 and continue about 1.5 miles – you'll see a culvert with a wide gate on the right (east) side of the road.

Directions to D.S.S. from Denver, arrival from the North (for after-dark arrivals):

Take I-25 eastbound to exit 316 (Byers). Turn left at end of ramp which puts you on eastbound US-36. Take US-36 east 17.2 miles to CR 241. Turn right (south) onto CR 241 and continue for 6.2 miles. The D.S.S. entrance is on the left between two tall posts.

Note: Travel distance from Denver using the North route is actually 3.9 miles shorter than the traditional route. The first 5 miles of CR 241 going south from US-36 is narrow and somewhat rough. Be careful.

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A Blast From the Past—Patti Kurtz at the first Rocky Mountain Star Stare in 1986 with Barney, the purple telescope before it became Barney. If you check this out in color, you'll see that she was, even then, the fashion statement she is today (sunglasses to die for). Image: Ken Florentino

The Urban Observatory

LIGHT POLLUTION: Colorado HB1160 “Outdoor Lighting Standards” passed Senate hearing on 3/13/01 and the entire Senate on 3/24: Special thanks to International Dark-Sky Association (I.D.A.) enthusiasts Jerry Sherlin, Chuck Carlson, Leroy Guatney, Greg Marino, Ron Mickle, and Bill Ormsby for helping prepare the Outdoor Lighting Standards bill defense downtown. Meanwhile, the California energy crisis expanded with a new set of rolling blackouts and P.G.&E. bankruptcy. As of this writing, the bill had not yet reached the Governor, because debate over growth legislation has slowed things. However, I.D.A. Colorado has succeeded in educating our state leadership about this issue, and plans to strategize about how to approach the next legislative session to expand the impact of this initial effort.

Please continue to explain light pollution to interested parties, and contact caslco@aol.com if you would like to help. Website: smartlights.tripod.com.

MENZEL CENTENNIAL CONFERENCE AT HARVARD: Donald H. Menzel was a 1920 graduate of D.U., and became internationally known for his science and as Director of Harvard College

Observatory (1952-66). He was born on April 11, 1901 in Florence, Colorado, and soon moved to Leadville—it was no coincidence that a major solar observatory (Climax-H.A.O.) was later located near there. His interest in astronomy was aroused by the total solar eclipse of June 8, 1918 and the outburst of Nova Aquilae shortly thereafter. Both events were extensively watched in Denver, and articles written by Chamberlin Director Professor Howe may have influenced the college student Menzel to pursue astronomy. Newly found references to Menzel in the Howe diaries will be presented at the conference. Watch this space for more news from the meeting.

SECRETIST BOOK MAY GO TO SECOND PRINTING: Hal Secrist’s memoirs *With Eyes on the Stars*—about life inside Chamberlin Observatory as a student resident in 1952 has sold well and a second printing is being discussed. Copies are available at S&S Optika (303-789-1089).

ANOTHER NIFTY WEBSITE: Want to see an all-sky view? Check out “The Night Sky Live” at website: www.concam.net. That bright thing might be the Moon!

—Dr. Robert Stencel, *D.U. Astronomy*, www.du.edu/~rstencel

2001 Van Nattan-Hansen Scholarship For Studies in Astronomy and Related Fields

The Van Nattan-Hansen Scholarship Fund Committee, in cooperation with the Denver Astronomical Society (D.A.S.), is now accepting applications for 2001 scholarship awards. These awards are open to graduating high school seniors and undergraduate college students with majors or planned majors in astronomy or closely related fields.

William R. Van Nattan (1921-1971) loved astronomy. His enthusiasm continues to enrich, enlighten, and capture the interest of others through his many and varied contributions to astronomy. He was a founding member of both the Denver Astronomical Society and the National Amateur Astronomers (N.A.A.). As chairman of the Denver Planetarium Committee in 1955, he was instrumental in providing a planetarium for the people of Denver at the Natural History Museum. For many years Van Nattan assisted in teaching astronomy at the University of Denver’s Chamberlin Observatory.

Charles Hansen was also an avid supporter of Denver astronomy. Upon his death he left a significant portion of his estate to the Denver Astronomical Society for use in supporting the Fund.

To honor their memories, this scholarship fund was established by the Denver Astronomical Society in 1973. Through the gifts and contributions of many friends of astronomy, the Fund continues to provide scholarships to high school and undergraduate students of astronomy and related sciences.

HOW TO APPLY

Scholarships will be awarded to students on the basis of demonstrated interests in astronomy and related sciences. A written letter of application should be accompanied by the following information:

- Proof of residency in the Denver Metro area
- Enrollment in at least 7 credit hours for the academic term

updates

- Transcripts showing a grade point average of at least 3.0
- A dated and signed letter of intent for his/her studies and declared major
- Letter(s) of recommendation from reputable sources
- Documents showing other financial aid the applicant will be receiving

Information provided by all applicants becomes the property of the Van Nattan-Hansen Scholarship Committee.

Please send copies of required information as appropriate. Documents cannot be returned.

Applicants will only be considered if their information is received no later than July 1, 2001. Please mail to:

**The Van Nattan-Hansen Scholarship Committee
P.O. Box 150743
Lakewood, CO 80215**

Scholarship awards shall not discriminate on the basis of race, color, sex, age, ethnic or national origin, or handicaps. The decision of the Van Nattan-Hansen Scholarship Committee shall be considered final.

Stellar Sites

Following are some interesting websites for your perusal. Feel free to submit your favorites to pkurtz@starfirecreations.com.

- ★ **2001 Mars Odyssey Mission:**
<http://mars.jpl.nasa.gov/odyssey/>
- ★ **Auroral Activity Observation Network:**
<http://solar.spacew.com/www/auroras.html>
- ★ **Astronomy Magazine:**
<http://www.astronomy.com>
- ★ **Denver Museum of Nature and Science:**
<http://www.dnmh.org>
- ★ **International Dark-Sky Association:**
<http://www.darksky.org/>
- ★ **Mars Missions:**
<http://mars.jpl.nasa.gov/>
- ★ **Realtime kp index:**
http://www.sec.noaa.gov/rpc/costello/pkp_15m_24h.html
- ★ **Sky & Telescope Magazine:**
<http://www.skypub.com>
- ★ **Software Bisque:**
<http://www.bisque.com>
- ★ **Space Environment Center**
<http://www.sec.noaa.gov>
- ★ **The Mars Society:**
<http://www.marssociety.org>



NGCs 4657 and 4656, in Canes Venatici— together they look like a hockey stick. NGC 4657 is the little galaxy (upper left) forming the top of the stick. Image: © Kiowa Observatory, 2001

For Sale

Celestron C8+ 8-inch Schmidt-Cassegrain

- Heavy duty adjustable tripod and wedge (not wedgepod)
- JMI motor focuser
- Hand paddle
- 8 x 50 right angle finder scope + Telrad finder
- 25mm Kellner EP
- 10mm Plossl EP
- 7.5mm Plossl EP
- Orion flexible dew shield

\$950. Prefer pick-up in Denver metro area or will meet halfway within reasonable driving distance. Contact: *Jim Carpenter* 303-932-0258, jmcarp@worldnet.att.net

8-inch Schmidt-Cassegrain (“Three years old, hardly used”)

- Field tripod
- Meade 2X Telenegative and MA25mm lenses
- Celestron 12.5mm PLOSSL-1
- Car lighter adapter

\$1500.00 or best offer. Need to sell quick. Contact: *Brent Stoll* 719-648-9597, stollen@qwest.net

The D.A.S. Listserve (For Members Only)

The D.A.S. Listserve is available to club members with an Internet connection. It's operated by the E-board and can be accessed from a link provided at the D.A.S. website. Members are encouraged to join up and share anecdotes, observing and imaging tips, or whatever moves you astronomically. Be sure to check the D.A.S. website for profiles of upcoming speakers.

o d d s ' n e n d s

About the Denver Astronomical Society

The D. A. S. is a group of amateur and professional astronomers that share a mutual interest in the heavens. The D.A.S. 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 Science and Nature and the Smithsonian Astrophysics Observatory's "Moon Watch" program. The D.A.S. 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 D.A.S. 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 <input type="checkbox"/>	Renewal <input type="checkbox"/>
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 website instead of by postal mail?	
Yes <input type="checkbox"/>	No <input type="checkbox"/>
Do you want the above information excluded from the yearly roster? Yes <input type="checkbox"/> No <input type="checkbox"/>	
<i>Please Circle All That Apply:</i>	
Regular Membership: \$30 Associate: \$10 (<i>Age 22 and younger</i>)	
..... \$ _____	
Astronomy Magazine/\$29	
Sky & Telescope Magazine/\$29.95	
..... \$ _____	
Dark Sky Site Fund Donation \$ _____	
Van Nattan Scholarship Fund \$ _____	
Chamberlin Restoration Fund \$ _____	
Total Amount Paid \$ _____	
Complete this form, or a copy, and mail it with your check or money order payable to <i>The Denver Astronomical Society</i> ; D.A.S. Treasurer, Chuck Carlson; 1521 So. Vine St.; Denver, CO 80210	



Denver Astronomical Society

c/o Chamberlin Observatory
2930 East Warren Avenue
Denver, Colorado 80208

j o i n u s