

The Denver

# OBSERVER

Newsletter of the Denver Astronomical Society  
*One Mile Nearer the Stars*

## CAN YOU HEAR ME NOW?

Light from the closest galaxy that we northern hemisphere observers can see takes about 2.2 million years to reach us. When we look at the glorious Great Galaxy in Andromeda (M31) we are looking 2.2 million years back in time. Chris Tarr stacked and processed this two-image composite he photographed in Grand Lake on Oct. 9 and 10, 2002. He used a Takahashi FSQ106 and the SBIG 10XME. M31's companion galaxies, M32 and M110, are easily visible in this spectacular photo.—PK

Image: © Chris Tarr 2003

## JANUARY SKIES 2003

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### HAPPY NEW YEAR!

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With only a sliver of a moon to interfere, the **Quadrantids** should be a nice enhancement to the Dark Site party, but the month's biggest celestial event will begin around 8 A.M. on the 4th—**Saturn** will transit the **Crab Nebula (M1)**. About 7 P.M. look for the ringed giant just slightly north of the nebula's center. Saturn's transit ends around 3 A.M. on the 5th, but the show's not over. Saturn's brighter moons should also be noticeable against the not-so-starry nebula. According to *Astronomy*, **Titan**, Saturn's largest moon, begins its transit around 9 P.M. and continues for about 24 hours! The more aperture you can beg the better for this unusual event, and CCD photographers should

|    |       |                                      |
|----|-------|--------------------------------------|
| 2  | ..... | New moon                             |
| 4  | ..... | Saturn transits the Crab Nebula (M1) |
| 10 | ..... | First quarter moon                   |
| 18 | ..... | Full moon                            |
| 25 | ..... | Last quarter moon                    |

be loaded for bear. This will be one image you won't want to miss.

Another great photo opp. and/or binocular target is the newly discovered "Christmas Comet" (C/2002 X5), Comet Kudo-Fujikawa—it should brighten to magnitude 5.4 by January 11. Don't wait too long to see this one. By perihelion at month's end it will have ducked behind the sun making it "virtually impossible to observe," says *S&T's* website at [www.skyandtelescope.com](http://www.skyandtelescope.com).

Dawning in the New Year brightly is **Venus** at magnitude -4.5 (January 1), while closeby during the beginning of the month (5° to the west) is the fiery 1.5-magnitude **Mars**. As the month progresses and the pair climbs the ecliptic ladder, Mars moves closer to the eye of the Scorpion, **Antares** ([α] alpha Scorpii), ending the month just 5° away from its brilliant rival.

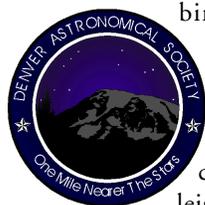
For all of you, I wish a joyous, peaceful, and prosperous 2003. May your skies be dark and clear. Love and Starlight—Patti Kurtz

# PRESIDENT'S CORNER

As an enormous fan of deep sky objects, recently I decided to focus on observing a little closer to home. In an effort to learn more about our closet celestial neighbor, the Moon, I began working on the lunar club Astronomical League certificate. At first I was a somewhat overwhelmed with the list of objects I would be required to view. Nonetheless, I began the quest. After only a few nights of observing I realized I was going to learn quite a bit from the composition of the observations required. Although I haven't committed the map of the Moon with the names of every crater and mare to memory, it has enabled me to gain a good understanding of the different features and phases.

The Astronomical League has several observing clubs and certificates you can pursue: asteroids, meteors, double stars, earth orbiting satellites, planetary observers, Messier and Messier binocular objects, Herschel 400 and Herschel II objects, Caldwell objects, deep sky

binocular objects, galaxy groups and clusters, southern skies binocular objects, sunspotters, and urban observations. You can complete the observations leisurely, but your records need to be accurate and thorough. Once you complete your observations you either



show your records to Jack Eastman, DAS Chief Observer, or send copies directly to the Astronomical League coordinator for that particular certificate.

I hope to complete my certificate by this spring and feel as if I'm well on my way to becoming an experienced observer. Visit [www.astroleague.org/all/obsclubs/obsclub](http://www.astroleague.org/all/obsclubs/obsclub) if you are interested in pursuing a certificate. For more information you can speak with Jack Eastman, DAS Chief Observer, and E-board member; Jerry Sherlin, Astronomical League Coordinator; and Sandy Shaw, E-board member and experienced observer and certificate/club holder. — Carla Swartz



Ted Cox enjoys last month's Holiday Potluck.

Image: © Joe Gafford 2003

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## DAS Officers

### President:

Larry Brooks

### Vice President and Acting President:

Carla Swartz (303) 246-6926

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Ron Pearson (303) 670-1299

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### ALCor:

Jerry Sherlin (303) 680-6894

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### Chief Observer:

Jack Eastman

## Executive Board Members

Ted Cox Sandy Shaw

Jack Eastman David Shouldice

Joe Gafford Steve Solon

Patti Kurtz Dan Wray

George Jones, Past President

### DAS Information Line:

(303) 986-5255

### DAS Correspondence:

Denver Astronomical Society  
c/o Larry Brooks  
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Denver, Colorado 80235

### Van Nattan Scholarship Fund

P.O. Box 150743  
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Patti Kurtz  
Email: [pkurtz@starfirecreations.com](mailto:pkurtz@starfirecreations.com)

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Denver Observer editor, Patti Kurtz  
StarFire Creations Unlimited  
(303) 948-5825

The Observer is available in color PDF format from the DAS website.

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

## DAS Schedule

### JANUARY

- 1 New Year's Day
- 4-5 Dark Sky Site Weekend
- 10 E-Board meeting, 8 P.M.
- 11 Clean-up Day (4:00 P.M.) and Open House (the Open House begins at dusk.)
- 17 General Meeting at Olin Hall, DU, 7:30 P.M.—Speaker: Wayne Kaaz (DAS), "Senior Observatories — How They Are Coping." and Officer/E-Board Nominations

### FEBRUARY

- 1-2 Dark Sky Site Weekend
- 7 E-Board meeting, 8 P.M.
- 8 Clean-up Day (4:00 P.M.) and Open House (the Open House begins at dusk.)
- 21 General Meeting at Olin Hall, DU, 7:30 P.M.—Speaker: TBD and Officer/E-Board Elections

Public nights are held every Tuesday and Thursday evenings beginning at the following times: October 1 - March 31 at 7:00 P.M.  
April 1 - September 30 at 8:30 P.M. at Chamberlin Observatory  
Costs to non-members are: \$3.00 adults, \$2.00 children.  
Please call (303) 281-9052 for reservations.

[www.denverastrosociety.org](http://www.denverastrosociety.org)

## Dark Sky Site Courtesy

*Please remember that white light disrupts the eye's dark adaptation and can ruin astrophotography. Following these simple guidelines will improve the experience for all:*

- ★ Upon arrival at the site, check to see if sign in has been instituted at the warming hut. We hope this will help alleviate problems members may be experiencing in trying to find a place to set up.
  - ★ Drive carefully on the road, there are blind spots in the low area and you will find cattle on the road at times.
  - ★ Try to arrive before dark.
  - ★ If you have to arrive after dark, turn off headlights when turning into site.
  - ★ Turn off all dome and trunk lights. If a light can't be turned off, pull the fuse, use layered red brake light tape or just duct tape over it.
  - ★ When you drive in, position your car so you can drive out directly instead of using your back up lights.
  - ★ Use only dim red flashlights. Never shine a flashlight in someone's face or on their scope.
  - ★ Please wipe your feet carefully before using the warming hut.
  - ★ Please chip in and do some cleaning up in the hut or at the observing sites. It is the responsibility of all users to keep the place nice.
  - ★ Serious astrophotographers may wish to use the South field since it is somewhat isolated from the rest of the area.
  - ★ If you are the last person to leave the site, turn off the lights and the heaters in the warming hut. Then, lock the warming hut and close the gate to the site.
  - ★ Members are responsible for educating their guests as to the rules.
  - ★ Prospective members, out of town astronomers, and others may be guests one time.
  - ★ Members can bring family any time and personal friends on a limited basis, but should not abuse the privilege.
  - ★ Groups of five or more guests must be cleared through the President or Vice President prior to visiting the Dark Sky Site.
  - ★ There is no sleeping in the warming shed overnight. However if you need to nap for a short period, you can use the shed. We would rather you fall asleep there rather than at the wheel on the way home.
  - ★ You may warm drinks in the microwave—it is not there for warming food and cooking since we have no water to clean up. If you spill, please clean up after yourself
- OTHER SUGGESTIONS:**
- ★ Wear warm clothing. The nights can be extremely cold in the winter and surprisingly cold in the summer.
  - ★ Bring your own power such as a battery and/or an inverter since the power sites are limited. Also bring extension chords.
  - ★ Hot drinks can help you survive the night!
  - ★ When approaching the telescope of someone who does not know you, introduce yourself and ask before looking through the scope. Most members (with the exception of astrophotographers when they are taking pictures) will be happy to share their scopes.
  - ★ Bring your own toilet paper in case that in the porta-potty runs out.

## DAS Spring Banquet and Installation of New Officers

The White Fence Farm (6263 West Jewell, Lakewood, CO 80232, 303-935-5945) will cook up a delicious meal for the DAS Spring Banquet on Saturday, March 22. We will have cocktails from 6:30-7:00P.M., dinner at 7:00, and a presentation to follow. The buffet will include White Fence Farm chicken, baked potatoes, various salads and cole slaws, corn fritters, and last but not least, sundaes for desert.

Reservations are limited and must be paid in advance. Dinner will cost \$20/person. Please make checks payable to the Denver Astronomical Society and mail to Steve Solon, 9774 West Elmhurst Place, Littleton, CO

80128 by March 8. Hope you can join us for our spring celebration and the installation of new officers.

### Welcome New Members!

The following folks joined the Denver Astronomical Society during the last few months. Welcome new members!

- Aaron Bandell
- Richard Goering
- John A. Grow
- Andrew Meteer
- Joe Pasillas
- Richard Province
- Jerry Raskin
- Craig L. Thighe
- Darryl M. Willard
- Matt Zimmer

## Directions to the E.G. Kline Dark Site

*The DAS Edmund G. Kline Dark Site is about 60 miles east of the "mousetrap" 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 the site from Denver, arrival from the North (for after-dark arrivals):*

Take I-70 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 DSS 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.*

## 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.

# o b s e r v e r s d e c k

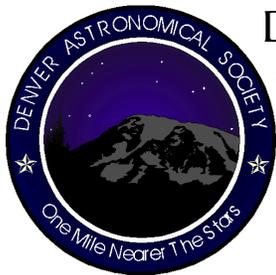
## About the Denver Astronomical Society

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 Science and Nature 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<br>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 (Age 22 and younger)                      |
| ..... \$   |   |
| Astronomy Magazine/\$29  |   |
| Sky & Telescope Magazine/\$29.95   |   |
| ..... \$   |   |
| Van Nattan Scholarship Fund  | ..... \$  |
| Chamberlin Restoration Fund  | ..... \$  |
| Total Amount Paid  | ..... \$  |
| <i>Please mail Dark Sky Site donations to: DAS Treasurer, Chuck Carlson, at the address below. (Make checks payable to the Dark Sky Site Fund).</i><br><i>Please complete this form, or a copy, and mail it with your check or money order payable to The Denver Astronomical Society:</i><br><b>DAS Treasurer, Chuck Carlson; 1521 So. Vine St.; Denver, CO 80210</b> |   |



## Denver Astronomical Society

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

### JANUARY'S MEETING JANUARY 17:

*General Meeting at Olin Hall, DU, 7:30 P.M.—Speaker: Wayne Kaaz (DAS), "Senior Observatories — How They Are Coping," and Officer/E-Board Nominations.*

### For Sale

12.5-inch f/4.8 Solid-tube Dobsonian (\$850)

#### INCLUDES:

- Crayford focuser
- Telrad

Dennis Cochran, phone (720) 870-0465 or  
(303) 677-4721 (work)

join us