

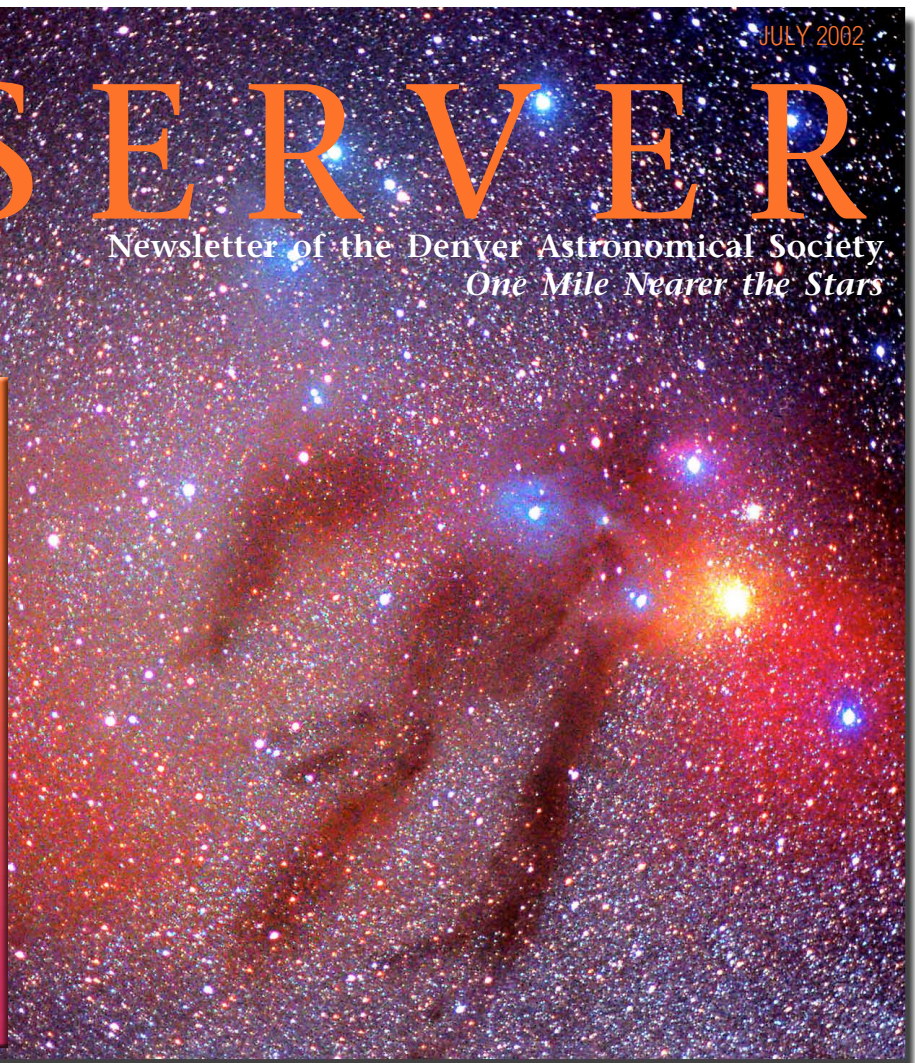
OBSERVER

Newsletter of the Denver Astronomical Society
One Mile Nearer the Stars

Southern Belle

Photographed from the Southern Hemisphere at close to 13,000 feet high, the Antares region in Scorpius is a spectacle of color. While traveling in the Lake Titicaca region for the November 3, 1994 total solar eclipse, Ken Wilcox, then president of the Astronomical League, organized the first Southern Skies Star Party. He died in 1999 but is remembered each year by those who attend. The StarGarden Foundation, an organization created by ICSTARS Astronomy, donates time, energy, money, school supplies, love, and more to the people living in the area—additionally, a 22-inch telescope was donated to the observatory at the hotel there and dedicated in Ken's honor. —PK

Image: © Vic and Jen Winter, 2002



Long Dog Days, Hot Smoky Nights

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JULY SKIES 2002

Can the stars be seen from Colorado these days? Observing small faint fuzzies through the smoke and haze might be a challenge all its own, but those particles have been making some spectacular red-orange sun rises, sunsets, and almost eclipse-looking moon views. There are some terrific planetary conjunctions this month but you'll be fighting morning and evening twilights. **Venus** is still beautifully obvious through the haze although it looks a bit dimmer and more yellow than it should be. About 30 minutes after sunset on the **3rd**, you'll see **Jupiter with Mars** to Venus's lower right—you might need binoculars. Get up early on the **2nd** (30-45 minutes prior to sunrise) to see **Mercury and Saturn** dancing closely together. *S&T* tells us to look in the same area on the 8th to see Saturn dangling just below the **thin crescent moon**. Check out your magazines for more conjunctions. I hope the smoke clears enough for all to get in some great observing this summer.—Patti Kurtz

- 2 Last quarter moon,
..... Mercury and Saturn only
..... 13' apart (about 4 A.M.)
- 10 New moon
- 16 First quarter moon
- 21 Summer Solstice at 7:24 A.M.
- 24 Full moon



Get out your binoculars and watch for Jupiter and Mars on July 3—they should be a lovely duet.

Image: © David Shouldice, 2002



The Lego™-Scope

This really works! At Rocky Mountain Star Stare Doug Trigg and Stephanie Pahl displayed their award-winning 4-inch telescope made out of Legos.™

PRESIDENT'S CORNER

Sorry about the bad schedule on the partial solar eclipse. We tried to schedule some better weather but you all know how *that* goes. We did manage to see it for about 15 seconds at Chamberlin. I personally saw it for over two seconds!



I have been thinking that it would be nice to get some younger people to join the DAS. There are a lot of young people out there that have an interest in astronomy. I

know that many members know of young people who have some interest in astronomy. At this point we do not have a youth group but it would sure be great to have some regular younger members. The membership for members under 22 is only \$10.00 per year. If you know of some young folks, bring them to a meeting, or bring them to the Public Night or Open House. If that's not possible have them contact me and I will try to get them involved.

We will soon start the work on the Ed Kline Dark Sky Site, and we'll need some help doing some of the work. We will try to schedule the

DAS Schedule

JULY

- 5-7 *Dark Sky Site Weekend*
- 12 *E-Board meeting, 8 P.M.*
- 20 **DAS Annual Picnic** (4:00 P.M.)
and
Open House (the Open House begins at dusk.)
- 26 *General Meeting at Olin Hall, DU, 7:30 P.M.—“Travel Light Years on a Light Budget” (See Page 3).*
- 31 (ALCON) (See Page 3).

AUGUST

- 2 *E-Board meeting, 8 P.M.*
- 8-10 **WUTS at FoxPark, and Dark Sky Site Weekend** (9-11)
- 16 **Ladies Night**
- 17 **Clean-up Day at Chamberlin** (4:00 P.M.) and
Open House (the Open House begins at dusk.)
- 23 *General Meeting at Olin Hall, DU, 7:30 P.M.—Jack Murphy and Chris Peterson “Investigation of the August 17, 2001 Fireball.”*

Public Nights are held every Tuesday and Thursday from 8:30 P.M. at Chamberlin Observatory. Costs to non-members are: \$3.00 adults, \$2.00 children. Please call (303) 281-9052 (new phone number) for reservations.

DAS Officers

President:

Larry Brooks (303) 986-5255
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Joe Gafford	Steve Solon
Patti Kurtz	Dan Wray
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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.

www.denverastro society.org

work out there to coincide with good observing times so you can work during the day and observe that evening. If you can volunteer send an E-mail to me (LBrooks100@aol.com) or Ted Cox (tedcox@asus.net). If you don't have E-mail, call me at 202 986-5255 and I will send your name to Ted.—Larry Brooks

****NOTICE:** *There is a combination lock on the front gate at the Edmund Kline Dark Site.*

*Any DAS member in good standing may obtain the combination by calling Larry Brooks at (303) 986-5255. Members can receive the combinations to the electricity and the shed after they have been briefed as to their use.***

ALCON 2002 to be held in Salt Lake City July 31-August 3



The national convention of the Astronomical League (ALCON 2002) will be held July 31 - August 3, 2002 at the University of Utah. You can download a registration form at <http://www.alcon2002.org/index1.html> or write to: ALCon 2002, P.O. Box 9574, Salt Lake City, UT 84109-9574.

If you have questions or comments about the 2002 convention you may contact the president of the ALCon 2002 Planning Committee, Lowell Lyon, E-mail: bolide@sisna.com, or call Josephine Grahn at (801) 277-1479 to have a registration form sent to you.

AstroTrivia

(Look for the answer in this issue.)

Q. What is the Georgium Sidus?

Sky & Telescope sends only one notice before subscriptions end. The DAS 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 DAS Treasurer, Chuck Carlson (chcarlo@du.edu). See the back page of this newsletter for more information.



Photo: © Patricia A. Kurtz, 2002

Pilkugaima

This lush area of the island teems with color and beauty. Isla del Sol, located in the center of Lake Titicaca in Bolivia, was said to be the center of Incan Sun worship. Home to the Temple of the Sun, the "Pilkugaima" Incan Steps, and a fountain said to bring wisdom, long life, and health are there as well as an Inca palace—this remains one of the most sacred islands in the Andes.

I feel fortunate to have attended the Southern Skies Star Party at Lake Titicaca in June where the Milky Way was mirrored in its waters.

Be sure to attend July's meeting and contribute your adventures to "Light Years on a Light Budget." I look forward to other members' astronomically-inclined journeys in time

and/or space—be sure to check with Carla Swartz to coordinate details: (303) 246-6926, or E-mail: CSastrogirl@aol.com. —Patti Kurtz

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Note from the editor:

Newsletter contributions (ccd and film astrophotos, members with telescopes, star party candids, short observing anecdotes, observing and imaging tips, etc.) are welcome and encouraged. This is your chance to strut your stuff! **Please submit by the 20th of each month as follows:**

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

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

Text: Articles should be no more than

250 words, please, unless we've spoken about a longer feature. Please paste article(s) 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*

(303) 948-5825

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updates

Fire in the Sky Rocky Mountain Star Stare 2002

by Sandy Shaw

The piney scent of the Pike National Forest surrounded us as we drove into Tarryall Meadows near Lake George, Colorado for the 2002 Rocky Mountain Star Stare (RMSS). A wide, grassy meadow bordered by the long-needled trees framed a bright blue sky with puffs of cumulus clouds dancing across it. The grass, yellow and crispy due to the drought, crunched under our feet while we unfolded our pop-up tent-trailer beside two beautiful pines strategically placed to give us late afternoon shade. Another DAS member was already camped on the other side of the same trees. He had cleverly placed his camp to get that morning shade so critical for the late sleeper—a smart move to avoid being oven-roasted within your tent as the rising sun's rays turn that nylon cocoon into your own personal tandoori.

More RVs and cars drove in on the dusty road during the afternoon, ringing the site with temporary homes beside the trees. Tarp-covered telescopes, some of them big as silos, began to dot the center of the meadow as astronomers found lots of space to set up their observing stations with ground cloths, tables, camera equipment, binoculars on tripods, and those indispensable observing aids—lawn chairs.

Under the big Star Stare tent later that night, Chris Earley welcomed us as President of RMSS's sponsoring organization, the Colorado Springs Astronomical Society. He presented a slide show depicting constellations of summer and gorgeous night sky objects that could be seen from the site. He also mentioned the current severe drought, the resulting extreme fire danger, and informed us that no open fires were allowed—no fires on the ground, no charcoal grills, and no

smoking outside vehicles. For anyone who had planned to cook over charcoal that weekend, Chris offered the use of a camp stove. Concluding his remarks, he described the schedule for the rest of the three-night weekend—catered barbecue dinners for Friday and Saturday evenings, several planned activities for children, a solar filter workshop, an amateur telescope making walkabout, two digital astrophotography talks, and some cool door prizes to be distributed Saturday night. A new feature this year was a snack bar late Friday and Saturday nights, offering coffee, hot chocolate, cookies, chips, and energy bars.

Back at our site, we watched the day's potent heat dissolve into a cool gray evening until the pine trees stood out against a darkening sky, their shadowy silhouettes pointing the way proudly to deep sky wonders awaiting us. Although a small light dome from Colorado Springs slightly hampered the view to the east, the site was dark, with good views to the south, west, and north. No wind and mild temperatures made it a comfortable observing night.

Reading and dozing in the shade of "our" pine trees the next day revived us for a short walk across the meadow to the big tent for the first barbecue dinner. Ample portions of chicken, brisket, smoked pork, and sausage hardly left room on our plates for potato salad, slaw, and baked beans. Iced tea and lemonade rehydrated us after the hot, dry day. The afternoon's fleecy clouds wafted themselves off the celestial stage by nightfall and another beautiful night of observing began. After a few hours standing at the scope in the cool night air, a steaming cup of hot chocolate from the new snack bar

warmed me in a particularly satisfying way, giving me the sugar rush needed to stay up until 4 A.M. to finish an observing program I had been working on for a couple of years.

Awakening at the crack of noon the next day, I learned that one of my friends had attended the solar filter workshop that morning, had learned how to make an off-axis filter easily and cheaply, and had bought me a piece of BAADER AstroSolar film. Not being a high-tech person, I was suspicious of the "easy" claim—but we made the filter a couple of days later and it was gratifyingly easy—and inexpensive, too.

Strong gusts of wind Saturday afternoon knocked over many scopes, including mine. After repairing minor damage to the rocker box, I enjoyed the breezy relief from the baking, dehydrating summer heat.

The amateur telescope making (ATM) walkabout showed us many innovations and inventions, some of them pleasingly bizarre and entertaining. A group of about fifteen followed the ATM organizers from campsite to campsite; at each stop on the tour, the telescope maker demonstrated his or her project as the organizers took photos and asked questions. Four innovations stood out for me from among the dozen or so that we hiked to see. A big, yellow, dome tent had been transformed into a planetarium for blind and low vision students—differently shaped and sized nuts and bolts, each representing a star, had been glued to the inside of the tent so you could trace out constellations with your hands and distinguish, from the shape and size of the "stars," the relative magnitudes of the stars. A barn-door photography mount had been computerized to even out its angular motion, extending exposure time. A multi-colored telescope made from Legos with a rocket-enhanced Telrad and a rubber duck mascot worked just dandily to give us magnified views of upside down pine trees. A homebuilt scope had a nifty way to facilitate air flow from its fan through holes rimmed with empty film cans and capped, when not in use, by the film can lids.

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

Another brief read in the shade and barbecue time was again at hand. Just before dinner, at about 5:15 P.M., people ran by the east window of our tent-trailer shouting “Fire!” We looked out and saw towers of light gray smoke billowing high above the pine trees and up past the clouds. At the dinner gathering a few minutes later under the big tent, Chris Earley announced that he had been in touch with the Forest Service, the fire had been reported, the Forest Service knew our group was camping nearby and advised us that we were in no danger right then even though the fire was only a few miles away. So we ate another excellent barbecue dinner and watched as fire-fighting slurry bombers flew low overhead toward the smoke. The forest fire grew amazingly quickly as we watched. In only about half an hour, the gray smoke plumes were much bigger and had been joined by more ominous-looking angry black roils of smoke. The planes continued to circle above us and head toward the fire—tiny spotter planes followed by larger slurry bombers.

By about 6:30 P.M., Chris made the unsurprising announcement that the Forest Service had asked us all to evacuate—but no great hurry, we could go ahead with award presentations and door prizes. Throughout the potential emergency Chris was in frequent cell-phone contact with the Forest Service and handled the situation admirably, keeping us informed but not panicked. My friend left immediately after the evacuation announcement to start packing (it took about three hours to load the car before the trip, and now we not only had to pack and load the telescope and camping gear, but also had to break down and fold up the tent-trailer). I stayed only long enough to watch the award presentations: DAS members Stephanie Pahl and Doug Trigg won for their inventive (and colorful!) Lego telescope and DAS member James Oden won for his innovation in mirror-cooling technology. Giving my door prize ticket away, I hurried back to pack, envisioning a chaotic blur of throwing things into the car. To my



Photo: © 2002, Sandy Straw

Rocky Mountain Star Stare participant and DAS member James Oden and his award-winning home-built scope. Check out the “passenger” at the eyepiece.

astonishment, it took us only about 45 minutes total to pack somewhat neatly, load the car fairly tidily, fold up the trailer, and hitch the trailer to the car.

Before dark we were driving out of the beautiful forested meadow where we had spent the last two days. A clumsy, barbed-wire gate had to be opened to leave the site; by the time we pulled the springy thing out of the way, four cars and RVs were already lined up behind us waiting, also, to get out. By the time we left the dirt road and reached the paved highway, a long string of cars

stretched out behind—none hurrying to pass us on the rough road. By 10:30

Continued on page 6

Astro-Trivia Answer

It is the name given to the planet Uranus by its discoverer, William Herschel. Herschel, who discovered the planet on March 13th, 1781, named it *Georgium Sidus* (George’s Star) in honor of King George III. This is the same King George named in the Declaration of Independence: “The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute Tyranny over these States.”

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

DAS Member Participation Prize Drawing

In an effort to increase member participation in outreach programs sponsored by the DAS, the DAS Member Participation Prize Drawing will become effective on July 1, 2002. The prizes will cost the club a total of \$120.00 annually, however, this type of incentive program demonstrates the value that our club places on volunteering and will encourage members to become active within our organization. Administration of this program will be added to the list of responsibilities of the acting Vice President.

Members who volunteer in various capacities will need to complete a DAS Member Participation Prize slip (below) and have an E-board member sign it. Slips will be available at DAS functions and the E-board member who signs the slip will be responsible for placing the slip in the designated file box in the boardroom at Chamberlin. E-board members are also eligible for this drawing, provided they have another E-board member sign off on their slip.

Examples of volunteer activities include:

- **Public Nights:** lecturing, operating the telescope, crowd control, etc.
- **Open Houses:** lecturing, operating the telescope, crowd control, selling DAS memorabilia, selling raffle tickets, bringing a personal telescope and talking with the public.
- **School Star Parties:** lecturing, bringing a personal telescope and talking with the public.
- **Chamberlin Clean Up Days:** assisting in any clean up activity at Chamberlin Observatory on designated days.

Welcome New Members!

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

- David Clowdus • Jean Pilon
- Allen Halverson • Bernard Poskus
- Stuart Hutchins • Sachin Raje
- Kathleen Murray • John Smith
- Dean Nichols

- **Edmund G. Kline Dark Site:** assisting in any building or development activity
- **Colorado Astronomy Day:** lecturing, crowd control, selling DAS memorabilia, selling raffle tickets, any committee activity (food preparation, vendor setup, etc.), bringing a personal telescope and talking with the public.

On a quarterly basis at general meetings a volunteer from the audience will draw a name from the box. The DAS member whose name is drawn will receive a participation prize. Prizes will vary from quarter to quarter, but will be equal to approximately \$30.00. Ideas for prizes are: a gift certificate to S&S Optika, yearly DAS membership dues, a *Sky and Telescope* or *Astronomy* magazine subscription, or other prizes that the E-board deems appropriate.

The first drawing will be held on September 20th and the next drawing will be on December 21st.

All participation slips will be entered into a random drawing that will be held on a quarterly basis during General Meetings.—
Carla Swartz

Fire In The Sky

Continued from page 5

p.m. Saturday night we were home; RMSS was over a day early.

Effects we saw in Denver from the fire over the next few days were the smell of woodsmoke and a cloud of ashy haze that extended northeast from the fire all the way to Nebraska (it even showed up on weather radar). Particulates in the air from the fire caused a drizzle of rain on Monday June 10th and wiped out most of the partial solar eclipse for those of us gathered at Chamberlin Observatory with our newly minted BAADER AstroSolar filters.

As I put away my gear after Star Stare, a few bits of dried yellow grass clinging to my duffel bags were a sad reminder of the beauty that had been devastated and the anguish suffered by those who had lost their dreams in the fire. But, like Yellowstone National Park after its fire, the Pike National Forest will survive. And, like a phoenix giving birth to itself from the



Image: © Carla Swartz, 2002

The Historic 20-inch Alvan Clark Refracting Telescope

Volunteers can be trained to use Chamberlin Observatory's prized 1894 telescope. The observatory is listed on the National Register of Historic Places and is used on a regular basis by club members and the general public.

ashes of the fire that destroyed it, dreams, too, can be reborn.—*Ms. Shaw completed her observations for the Astronomical League's Herschel 400 observing program at the 2002 Rocky Mountain Star Stare and looks forward to returning to this primo star party next year.*

If you go to Rocky Mountain Star Stare

RMSS 2003 is scheduled for June 26th-29th. Visit <http://www.rmss.org/> for more information about Rocky Mountain Star Stare and to read the official publication of the Colorado Springs Astronomical Society, *The Hypoxic Observer*. For more information about BAADER AstroSolar film and instructions for making a solar filter using the film, visit <http://www.astro-physics.com>, click on "products," then click on "solar accessories."

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LADIES NIGHT

*For Ladies Only—Whether you're a DAS member or related to one, please join us on the evening of **Friday, August 16**. The gathering place will be determined after we know how many women to expect. Please R.S.V.P. to Patti Kurtz either by e-mail: pkurtz@att.net or telephone (303) 948-5825, or phone or e-mail Carla Swartz at (303) 246-6926 or CSastrogirl@aol.com*

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.

**Directions to the
Dark Sky Site**

The DAS Deer Trail Dark Sky Site (DSS) 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 DSS 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.

edmund kline dark site

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
DENVER ASTRONOMICAL SOCIETY**

New Renewal

Name: _____

Address: _____

City, State, Zip: _____

Phone numbers: Home () Work ()

E-mail Address: _____

Occupation: _____

Other Interests: _____

(Associates Only) School: _____ Grade: _____

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Do you want the above information excluded from the yearly roster? Yes No

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Van Nattan Scholarship Fund \$ _____

Chamberlin Restoration Fund \$ _____

Total Amount Paid \$ _____

*Please mail Dark Sky Site donations to: DAS Treasurer, Chuck Carlson, at the address below. (Make checks payable to the Dark Sky Site Fund).
Please complete this form, or a copy, and mail it with your check or money order payable to The Denver Astronomical Society:
DAS Treasurer, Chuck Carlson; 1521 So. Vine St.; Denver, CO 80210*



Denver Astronomical Society

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

JULY'S MEETING

JULY 26:

"Light Years on a Light Budget" (See Page 3).

j o i n u s