

# OBSERVER

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

## Duet in the Dark

The apparent approach of Comet Ikeya-Zhang towards the Andromeda Galaxy (M31) was widely anticipated by observers. Photographers particularly wanted to record the event just as Ron Pearson did in this image of the dynamic duo. Solar system objects present a different kind of challenge to photographers than do deep-sky objects: Getting just the right field of view and time exposure can be tricky, especially when one wants to get the somewhat moving target up close and personal while also capturing a deep-sky object in the frame. Add to the mix a desire to keep the background stars nice and round—it's not an easy endeavor. Most astrophotographers spend years in the field before sharing the results of such attempts. Great job, Ron, and thanks! Image made: April 4, 2002, 300mm f/4.5 lens, Fuji Superia 800 ASA film.—PK

Image: © Ron Pearson, 2002

# Planetary Promenade

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## MAY SKIES 2002

This is one *extremely* active month for our solar system. Be sure to look at your astronomy magazines for more information. **Ikeya Zhang** is on its way out but should still be observable in the early morning hours: Once twilight sets in it will be tough to see. The **Eta Aquarid** meteor shower will peak in the wee hours of the 6th, and of course, the greatest visible planetary lineup in almost 20 years will be gracing the evening skies for the first 10 days or so. You'll need a nice view of the west-northwest horizon about an hour after sunset. **Mars** (top), **Venus** (the brightest), and **Saturn** (splendid) will create a triangle in the sky. Look to the lower right of these three and you'll see **Mercury**—swift and bright. Follow the ecliptic beyond the triad halfway up the western sky and see the King of Planets, **Jupiter**. Once Mercury starts to fade (by the 10th), the planets and the moon will interact and pair up in an awe-inspiring dance for most of the month. Don't miss it. May our skies be clear for the views! —Patti Kurtz

- 4 ..... Last quarter moon
- 12 ..... New moon
- 14 ..... Saturn 1.1° S. of moon,  
Mars 0.6° N. of moon,  
Venus 0.8° N. of moon
- 19 ..... First quarter moon
- 26 ..... Full moon, Penumbral lunar eclipse  
(minimal for us) at moonset/sunrise



Between the 3rd and 10th of May, planets Saturn, Venus, and Mars will snuggle up together within a 5° diameter circle.

Image: © David Shouldice, 2002



**Solar observing at the LAS North Sterling Star Party**  
 LASers observed the sun in both white light and H-alpha at the star party last month. From left to right, Dave Ewing, Michael Hotka, and Brian Kimball.

## PRESIDENT'S CORNER

WOW and WOW!!!!!!!!!!!! It's time for summer and for all of us fair weather observers to get out and look at some skies.

The Ed Kline Dark Site will be up and running like crazy this summer. Get out there even if you do not have a telescope. It is a great time to be had by all.



Development plans for the summer include getting a vault toilet installed and getting some more pads poured including some pads on the south end for photographers. The photographer's pads are designed so that users can make their own wind breaks and head light protectors to use when shooting. We are going to need a lot of volunteer help to get the work done especially from the regulars at the site. If

## DAS Schedule

### MAY

- 3 E-Board meeting, 8 P.M.
- 5-12 Texas Star Party (See Page 3.)
- 10-11 Dark Sky Site Weekend
- 18 **Observatory Cleaning Day** at 10:00A.M. and **Open House**—"Planetary Showcase" (begins at 7:00 P.M.)
- 24 General Meeting at Olin Hall, DU, 7:30 P.M.—Declan O'Donnell, "Space Law."
- 24-26 RTMC (See Page 3.)

### JUNE

- 6-9 Star Stare (See Page 3.)
- 7-9 Dark Sky Site Weekend
- 8-15 Grand Canyon Star Party (See Page 3.)
- 14 E-Board meeting, 8 P.M.
- 15 **Observatory Cleaning Day** at 10:00 A.M. and **Open House** (begins at 7:00 P.M.)
- 21 General Meeting at Olin Hall, DU, 7:30 P.M.—Bryan White, "Nitescapes 3-D, Northern Lights."

Public Nights are held every Tuesday and Thursday from 8:30 P.M. at Chamberlin Observatory  
 Costs to non-members are: \$2.00 adults, \$1.00 children  
 Please call (303) 871-4333 for reservations.

## DAS Officers

### President:

Larry Brooks (303) 986-5255  
 Email: LBrooks100@aol.com

### Vice President:

Carla Swartz (303) 246-6926  
 Email: CSastrogirl@aol.com

### Secretary:

Ron Pearson (303) 670-1299  
 Email: rpearson@ecentral.com

### Treasurer:

Chuck Carlson (303) 744-7331  
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### ALCor:

Jerry Sherlin (303) 680-6894  
 Email: SHERLINJ@aol.com

### 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  
 3686 South Depew, #8  
 Denver, Colorado 80235

### Van Nattan Scholarship Fund

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 Lakewood, Colorado 80215-0743

### Webmistress:

Patti Kurtz  
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### Newsletter:

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.**

# www.denverastrosoociety.org

you can volunteer, please E-mail me so we can build a list ([Lbrooks100@aol.com](mailto:Lbrooks100@aol.com)). Much of the work we hope to have finished before observing begins in the evenings.

The plans for the following year are to start on a club observatory. Once done, we will have a 17-inch scope and, we hope, some others. This, of course, depends on more fund raising.

Don't forget the Summer Star Parties and camping trips (see Page 4). They are great times and once again, you do not need a scope. Check the website and *The Observer* for details.—Larry Brooks

### The Oscars for Observers: The Envelope Please . . .



The attempt and subsequent attainment of an observing certificate from the Astronomical League is one of the greatest accomplishments made by an amateur astronomer. For instance, anyone who has ever received a Messier certificate knows the hours spent behind the “business end” of a scope hunting and finding sometimes very elusive quarry. Cold nights, mosquitoes, and unexpected car lights all contribute to the challenge of the endeavor. Guidelines for each award can be found on the Astronomical League’s website at: <http://www.astroleague.org/all/obsclubs/obsclub.html> or contact Jerry Sherlin for more information (303-680-6894).

Each award has its own rules, regulations, and observing lists. To qualify for the awards you must be a member of the Astronomical League through an affiliated society (the DAS is an affiliated society) or a member-at-large. Most of the lists are available on

*Continued on page 4*

*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](mailto:chcarlo@du.edu)). See the back page of this newsletter for more information.*

## Astronomical League Awards

The following is from the Astronomical League:

“The Observing Clubs offer encouragement and certificates of accomplishment for demonstrating observing skills with a variety of instruments and objects. These include the Messier Club; Binocular Messier Club and the Herschel 400 Club, the Deep Sky Binocular Club, Southern Skies Binocular Club, the Meteor Club, the Double Star Club, and the newly formed Lunar Club.

Each club offers a certificate based upon achieving certain observing goals. These are usually in the form of a specific number of objects of a specific group with a given type of instrument. Occasionally there are multiple levels of accomplishment within the club. There is no time limit for completing the required observing, but good record keeping is required.

When you have reached the requisite number of objects, your observing logs are examined by the appropriate authority and you will receive a certificate and pin to proclaim to all that you reached your goal. Many local astronomical societies even post lists of those who have obtained their certificates.”

Please check off the awards you've received:

<p><b>Learner</b></p> <p>_____ ..... Lunar Club</p> <p>_____ ..... Urban Observing Club</p> <p>_____ ..... Universe Sampler Club</p>	<p><b>Topical</b></p> <p>_____ ..... Asteroid Observing Club</p> <p>_____ ..... Double Star Club</p> <p>_____ ..... Earth Orbiting Satellite Observing Club</p> <p>_____ ..... Master Observer Club</p> <p>_____ ..... Meteor Club</p> <p>_____ ..... Planetary Observers Club</p> <p>_____ ..... Sunspotters Club</p>
<p><b>Telescopic</b></p> <p>_____ ..... Messier Club</p> <p>_____ ..... Herschel 400 Club</p> <p>_____ ..... Herschel II Club</p> <p>_____ ..... Caldwell Club</p> <p>_____ ..... Arp Peculiar Galaxy Club (allows for CCD imaging, but not exclusively)</p>	<p><b>Binocular</b></p> <p>_____ ..... Binocular Messier Club</p> <p>_____ ..... Deep Sky Binocular Club</p> <p>_____ ..... Southern Skies Binocular Club</p>

Your Name: \_\_\_\_\_  
Any experiences you'd like to share about getting the award (make a copy of this to fill out and use the back of it or use a separate sheet of paper if you like): \_\_\_\_\_

Your E-mail or Phone number (not required): \_\_\_\_\_

### 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](mailto: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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## SPRING AND SUMMER STAR PARTIES 2002

If you know of others that should be listed, please contact the *Observer* Editor. Thanks.

STAR PARTY	DATES	HOSTING ASSOCIATION	CONTACT INFORMATION
Texas Star Party 2002	May 5-12	Operated by Texas Star Party, Inc. and cosponsored with Southwest Region of the Astronomical League	<a href="http://www.metronet.com/~tsp/">http://www.metronet.com/~tsp/</a>
The 33rd Annual RTMC (Riverside Telescope Makers Conference Astronomy Expo)	May 24-26	Riverside Telescope Makers	<a href="http://www.rtmc-inc.org/">http://www.rtmc-inc.org/</a>
16th Annual Rocky Mountain Star Stare	June 6-9	Colorado Springs Astronomical Society	<a href="http://www.rmss.org/">http://www.rmss.org/</a>
Grand Canyon Star Party	June 8-15	Tucson Amateur Astronomy Association	<a href="http://www.tucsonastronomy.org">http://www.tucsonastronomy.org</a>
Southern Skies Star Party on the shores of Lake Titicaca in Bolivia	June 8-15	ICSTARS	<a href="http://www.icstars.com">http://www.icstars.com</a>
Table Mountain Star Party	July 11-13	Table Mountain Star Party Association in Ellensburg, WA.	<a href="http://www.tmspa.com/">http://www.tmspa.com/</a>
12th Annual Weekend Under the Stars (WUTS)	August 8-10	The Cheyenne Astronomical Society and the Laramie Astronomical Society and Space Observers	<a href="http://users.sisna.com/mcurran/">http://users.sisna.com/mcurran/</a>
Montana Starwatch 2002	August 9-10	The Southwest Montana Astronomical Society	Mike Murray (406) 994-7309 E-mail: <a href="mailto:mmurray@montana.edu">mmurray@montana.edu</a>
9th Annual Enchanted Skies Star Party	October 3-6	Socorro, New Mexico	<a href="http://www.socorro-nm.com/starparty/">http://www.socorro-nm.com/starparty/</a>

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the AL's website. The exception is the Universe Sampler program. For that observing program, you'll need to purchase the *Universe Sampler* (\$8.00) from the AL (<http://www.astronomicalleague.com/universe.htm>).

All the awards require good record keeping. Most require the following, *but check with each individual award for exact requirements*:

- The object
- Date of observation
- Time of observation
- Seeing conditions
- Type of instrument

- A short note describing your observations.

If you have received an award, please let your fellow members know. Fill out the form on Page Three and send it to Larry Brooks, 3686 South Depew, #8, Denver, Colorado 80235, or email it to him at [Lbrooks100@aol.com](mailto:Lbrooks100@aol.com), or Patti Kurtz at [pkurtz@starfirecreations.com](mailto:pkurtz@starfirecreations.com).

Officers and E-board members can sign off on your observing lists for submission to the League. And, as you receive more awards, please keep us posted. You can help other members by sharing your experience.—*Patti Kurtz*

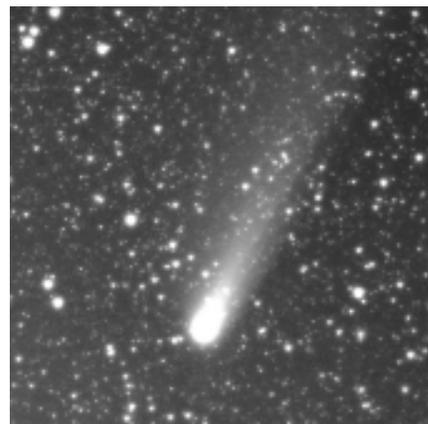


Photo: © 2002, Gary Emerson

Comet Ikeya-Zhang

# o b s e r v e r s   d e c k

## Light Years on a Light Budget

Travel Light Years On a Light Budget! Summers on Mars? Winters in Orion's Belt? Maybe a jaunt to the rings of Saturn. Take us with you. If you like to travel to astronomically significant sites here on terra firma, we'd love to tag along. Whether it was a trip to Mount Wilson Observatory or an eclipse in Africa, pack up those old slides, photos, and postcards of the places you've visited and bring them to July's General Meeting. You'll be our tour guide for your trips around the galaxy.

For more information about participating in this earthbound travel escape, contact your Astro Cruise Director, Carla Swartz, by July 1st to coordinate the details: (303) 246-6926, Email: CSastrogirl@aol.com.

### Welcome New Members!

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

- Jim Cole
- Mike Kuzio
- Jody McCollough
- Kenneth Piner
- Shawn Sidwell
- Larry Taylor
- Ron Thomas
- Joe Wainwright

## 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:*

- ★ 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.

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## 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	<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	
..... \$ _____	
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

### MAY'S MEETING

**MAY 24:**

Declan O'Donnell,  
"Space Law."

S & S OPTIKA  
Colorado's Premier Astronomical Supply Store  
(303) 789-1089

join us