Issue 2008-08

IO - August 2008

Eugene Astronomical Society
Annual Club Dues $25
President: Sam Pitts - 688-7330
Secretary: Jerry Oltion - 343-4758
Additional Board members:
Jacob Strandlien, Tony Dandurand,
Tommy Lightning Bolt.

www.eugeneastro.org

EAS is a proud member of:

The Astronomical League
The World's Largest Federation of Amateur Astronomers

Eugene Astronomical Society

www.eugeneastro.org

NEXT MEETING: AUGUST 28TH

The Planetary Gathering in the West and A Glimpse at GLIMPSE

by Rick Kang

Starting in mid-August and continuing into December and actually into 2009, various planets of our Solar System appear to group together and to stage several dramatic conjunctions (meetings) with one another and with the Moon in the post-sunset western sky. Rick will explain why these chance opportunities happen, and will furnish a calendar summary of highlights. We'll also look at why the dance of the planets moves to the eastern pre-dawn sky next Spring.

On the galactic scale, there has been an ongoing project to survey the nature of the galactic disk. This project, the Galactic Legacy Infrared Mid-Plane Survey Extraordinaire or GLIMPSE, has been conducted primarily by the Spitzer InfraRed Telescope Facility. We'll look at some of the images and note some of the highlights of discoveries.

We'll also have our usual information sharing between members. We always encourage audience participation during our meetings. EAS meetings are traditionally times when we learn about astronomy and share experiences and knowledge of astronomy and the night sky. If you have something to share with the group, please do so.

Come and enjoy the wonders of the night sky with the Eugene Astronomical Society. After the meeting we can gather at The North Bank for dinner and conversation.

August Events

Remember our "First Quarter Friday" on August 8th at the College Hill Reservoir, 24th and Lawrence, starting at 9:00. First Quarter Fridays are meant to be informal, fun gatherings for EAS members and the general public. Bring a telescope and have fun observing and sharing the view with whoever shows up.

We're also hosting a star party on August 9th at the Cascara Campground on Fall Creek Reservoir. We can stay all night, so if any EAS Members want a camping spot please let Sam know by private email and he can put you in touch with the coordinator, Ranger Ginny Vickers. Two vehicles per campsite.

REMEMBER THAT WE NOW MEET AT EWEB

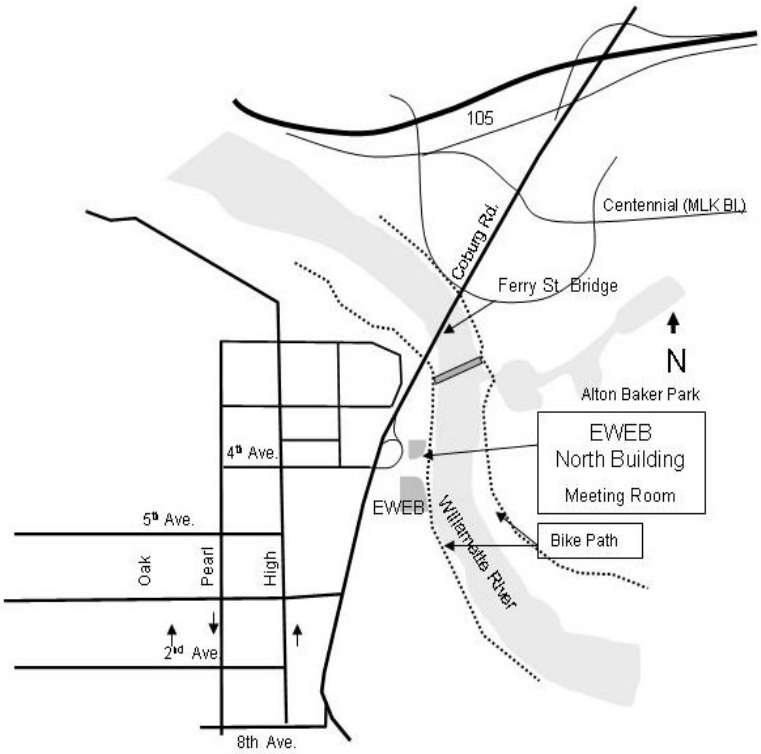
500 E. 4th Avenue in Eugene.

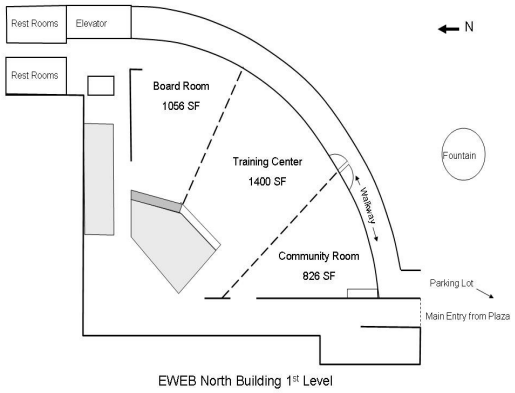
OUR NEXT MEETING WILL BE ON THURSDAY, AUGUST 28th AT 7:00 IN THE NORTH BUILDING'S COMMUNITY ROOM. This is the first of the three wedge-shaped rooms in the semicircular building to the north of the fountain at EWEB's main campus on the east end of 4th Avenue.

Meeting dates and times for the rest of the year:

August 28 (Thursday) in Community Room
September 30 (**Tuesday**) in Community Room
October 23 (Thursday) in Community Room
November 10 (**Monday**) in Community Room
December 18 (Thursday) in Community Room

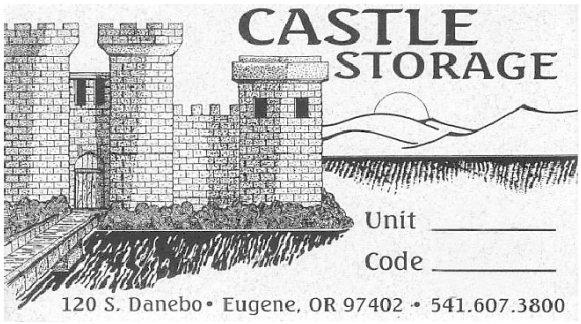
Join the EAS mail list at http://eugeneastro.org/mailman/listinfo/org.eugeneastro.general





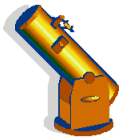
EWEB North Building 1st Level

EWEB is located at 500 E. 4th Avenue. Our meetings will be in the first room in the semicircular building to the north of the fountain.

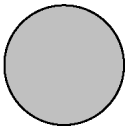
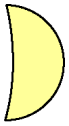
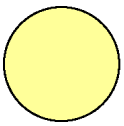


Thank You Castle Storage

Board member Tommy Lightning Bolt was instrumental in getting a storage unit from the owners of Castle Storage for EAS to store its telescopes and equipment. EAS would like to thank Castle Storage for their generosity and support for our group. Please give them a call if you need a storage space, and tell your friends. They are great people and offer secure and quality units.



Observing in August


August 1 (30)	August 8	August 16	August 23
Mercury Rise 6:13 AM	Mercury Set: 8:59 PM	Mercury Set: 8:57 PM	Mercury Set: 8:49 PM
Venus Rise 07:16 AM	Venus Set: 9:13 PM	Venus Set: 9:03 PM	Venus Set: 8:53 PM
Mars Set 10:11 PM	Mars Set 9:53 PM	Mars Set: 9:32 PM	Mars Set: 9:13 PM
Jupiter Set 04:01 AM	Jupiter Set: 3:30 AM	Jupiter Set: 2:56 AM	Jupiter Set: 2:26 AM
Saturn Set 9:51PM	Saturn Set: 9:25 PM	Saturn Set: 8:56 PM	Saturn Rise: 7:14 AM
Uranus Rise 10:11 PM	Uranus Rise: 9:43 PM	Uranus Rise: 9:11 PM	Uranus Rise: 8:43 PM
Neptune Rise 9:03 PM	Neptune Rise: 8:35 PM	Neptune Rise: 8:03 PM	Neptune Set: 5:50 AM
Pluto Set 3:19 AM	Pluto Set: 2:51 AM	Pluto Set: 2:19 AM	Pluto Set: 1:51 AM

All times: Pacific Standard Time (Nov 4, 2007-March 9, 2008) = UT-8 or U.S. Pacific Daylight Time (March 9-November 2, 2008) = UT - 7 hours.

Date	Moonrise	Moonset	Sunrise	Sunset	Twilight Begin	Twilight End
8/1/2008	**07:13**	**21:55**	**07:01**	**21:35**	**05:00**	**23:36**
8/2/2008	08:32	22:19	07:02	21:34	05:01	23:34
8/3/2008	09:46	22:40	07:03	21:33	05:03	23:32
8/4/2008	10:58	22:59	07:04	21:32	05:05	23:30
8/5/2008	12:06	23:19	07:05	21:30	05:07	23:28
8/6/2008	13:14	23:40	07:06	21:29	05:09	23:26
8/7/2008	14:21	00:04	07:08	21:27	05:10	23:24
8/8/2008	**15:26**	**00:32**	**07:09**	**21:26**	**05:12**	**23:22**
8/9/2008	16:31	——	07:10	21:25	05:14	23:20
8/10/2008	17:31	01:06	07:11	21:23	05:16	23:17
8/11/2008	18:27	01:48	07:12	21:22	05:18	23:15
8/12/2008	19:13	02:39	07:13	21:20	05:19	23:13
8/13/2008	19:52	03:38	07:14	21:19	05:21	23:11
8/14/2008	20:24	04:43	07:15	21:17	05:23	23:09
8/15/2008	20:50	05:51	07:16	21:16	05:25	23:07
8/16/2008	**21:13**	**07:01**	**07:18**	**21:14**	**05:26**	**23:05**
8/17/2008	21:33	08:11	07:19	21:13	05:28	23:03
8/18/2008	21:53	09:21	07:20	21:11	05:30	23:00
8/19/2008	22:14	10:32	07:21	21:09	05:32	22:58
8/20/2008	22:36	11:45	07:22	21:08	05:33	22:56
8/21/2008	23:02	13:00	07:23	21:06	05:35	22:54
8/22/2008	23:35	14:18	07:24	21:04	05:37	22:52
8/23/2008	**00:17**	**15:35**	**07:26**	**21:03**	**05:38**	**22:50**
8/24/2008	——	16:48	07:27	21:01	05:40	22:48
8/25/2008	01:10	17:52	07:28	21:00	05:42	22:45
8/26/2008	02:16	18:44	07:29	20:58	05:43	22:43
8/27/2008	03:31	19:24	07:30	20:56	05:45	22:41
8/28/2008	04:51	19:55	07:31	20:54	05:47	22:39
8/29/2008	06:09	20:21	07:32	20:53	05:48	22:37
8/30/2008	07:24	20:43	07:34	20:51	05:50	22:35
8/31/2008	08:37	21:03	07:35	20:49	05:51	22:32

Courtesy Sam Pitts

Other Items of Interest This Month

Jupiter prominent all month
8/3-8/7 Neptune near 52 Capricorni (easy find!)
8/4-8/5 Double shadow transit on Jupiter beginning 2:04 a.m. 8/5.
8/8 First Quarter Friday star party (Europa shadow transit during star party.)
8/9 Cascara star party
8/12 Perseid meteors peak in a.m.
813-8/14 Saturn, Venus, Mercury bunch very low in western sky to left of Sun.
8/19-8/21 Venus, Mercury remain very close at sunset

For Current Occultation Information

Visit Derek C. Breit's web site

"BREIT IDEAS Observatory"

http://www.poyntsource.com/New/Regions/EAS.htm

Go to Regional Events and click on the Eugene, Oregon section. This will take you to a current list of Lunar & asteroid events for the Eugene area. Breit continues to update and add to his site weekly if not daily. This is a site to place in your favorites list and visit often.

All times are for Eugene, Oregon Latitude 44º 3' 8" Longitude 123º 5' 8" for listed date

An Oregon Star Party Checklist

by Charlotte Conlin

Charlotte Conlin with Marvin the Astroscan

During the summer of 2004 my husband, Tom Conlin, ground his first mirror and completed his first telescope. Throughout the following year we attended as many local star parties and astronomy related events as time and the weather would allow so we could learn how to use this wonderful creation. We began to hear about a large astronomy event held in Eastern Oregon every year in late August/early September called the Oregon Star Party. People who had attended in the past raved about the dark skies, great views and general all-around fun so in September of 2005 we decided to check it out for ourselves. We loaded up our Honda CRV with the telescope and all the astronomy related gear Tom thought was necessary. I added everything from the long list I had prepared weeks early which I hoped would cover every conceivable situation, real or imagined. We were going tent camping and star watching in the high desert. We were packed to the gills.

We learned a lot that first year, not just about how really beautiful and awe inspiring the skies are out there, but also what we really should have brought with us and what we should have left behind. Every nook and cranny of the Honda is still filled to bursting every year, but with stuff that we've learned makes the trip a much more pleasant experience. The following list is geared towards tent camping and is by no means perfect. We've tweaked it every trip and will probably do so in the future. I hope you'll find it useful.

This year's OSP runs from August 27 thru 31. For information about OSP check out their website at http://www.oregonstarparty.org/

THE LIST

—Telescope(s) and eyepieces
—Rug(s)/tarp(s) for the scope(s)
—Mylar blankets/coverings for the scope(s)
—Astronomy books, planisphere
—Red flashlights
—Red cellophane/rubberbands
—Camera
—Binoculars
—Travel journal
—Clothing (Cool garments for the days which can get quite warm and warm clothing for the evenings when it cools down, rain gear, sturdy shoes/boots, hats/caps)
—Personal hygiene items (Towels, soap, toothbrush/paste, etc. I HIGHLY recommend spending the money for the use of shower truck as it gets hot and DUSTY there. See http://www.oregonstarparty.org/vendor/shower.htm for more information.)
—Tent
—Extra metal stakes for tent
—Sleeping bags/extra blankets

—Air mattress/pump or sleeping pads
—FOOD (We bring food for breakfast, lunch and snacks and then spring for the Star Dinners which are reasonable and tasty. See http://www.oregonstarparty.org/vendor/food-chuckwagon.htm for more information)
—Cooler/ice
—Cooking utensils
—Stove/propane
—Matches/lighter for lighting the cooking stove
—Oven mitt
—Eating utensils (cups, plates, bowls, silverware, sharp cutting knife)
—Thermos
—Kitchen towels
—Clothes pins
—Sponge/dish soap
—Cutting board
—Roll of paper towels
—Chairs
—Small folding tables
—Trash bags
—WATER (we bring at least three 5 gallon containers for cooking, drinking, etc. plus water bottles)
—Shovel
—First Aid kit
—Insect repellant
—Toilet paper
—Handiwipes
—Large white buckets (I use one for grey water after washing dishes. They also make good chairs in a pinch.)
—SUN PROTECTION (Canopy, umbrellas, hats, sun glasses, good sunscreen, chapstick—It can get very hot out there)
—Rope/cord/string (Because you never know when you might want a bit of rope—to paraphrase Sam Gamgee)
—GPS/maps/written directions to the site (The written directions come in very handy, especially it if is the first time you travel to the site. GPSes don't always know everything as we discovered on our first trip.)
—Fire extinguisher
—Dust masks
—Extra batteries
—Axe
—Maul
—Rake (There are a lot of rocks at the site and the rake come in very handy for moving them about and out of the place where you want to put up your tent.)
—Broom
—Bungee cords
—Scissors
—Duct tape

Visit Pine Mountain Observatory

Rick Kang reports from Pine Mountain:

Come see the new facilities at Pine Mountain Observatory in Central Oregon: We now present a variety of programs in our new tent auditorium, and have the Info Center/Gift Shop building nearby, where you can purchase a cup of hot cocoa, warm up, and browse a variety of books, photos, and clothing items. The "X15" telescope (14" on Paramount in original 15" dome) has been installed and is awaiting further testing. With the improved summer weather, the dark skies await you. The Moon will interfere with the peak of the Perseid meteors this year, but there are always numerous additional bright ones to see the weekends on either side of the peak (August 12th).

Bring your scope. There's plenty of room, and electricity.

-Rick (local info:rkang@efn.org)

From the Pine Mountain Newsletter:

When sky viewing isn't at its best, the Friends of Pine Mountain Observatory will host sci-fi nights in the tent. Bask in the glow of the full moon, howl at it if you prefer, or come to the tent for a classic sci-fi fix:

Sat, Aug. 16: *Forbidden Planet* (1956)

Sat, Sept. 13: *The Man Who Changed His Mind* (1936)

Field Burning and Astronomy

It sometimes seems like you just can't win. Lane County astronomers put up with a lid of rain clouds most of the year, then when the weather clears, field burning starts up. Summertime is smoke time for Lane County, and astronomers have just as hard a time seeing through smoke as we do through rain clouds. Smoke also damages telescope optics, not to mention the lungs of anybody who goes outside and has to breathe the stuff for extended periods.

The general public is growing more vocal in its opposition to field burning. In response, the number of acres set on fire each year have been reduced considerably since the 1960s, and every year the state legislature considers banning the practice altogether. But that hasn't happened yet, as our often-orange skies attest.

What can astronomers do? Aside from covering our optics and heading indoors when the smoke clouds drift our way, we can let the people in charge know that the practice is not good for astronomy.

From the Lane Regional Air Protection Agency's web site (http://www.lrapa.org/public_education/field_burning/) we learn:

Field burning in Oregon is regulated by the Oregon Department of Agriculture's (ODA) Smoke Management Program. Up to 65,000 acres of annual and perennial grass seed crop residue and cereal grain residue within the Willamette Valley are burned each summer. Field burning typically starts mid-July and ends mid-October.

Complaints about field burning

Complaints about field burning are logged, compiled weekly and reported to the Governor's Office. You may call the Oregon Department of Agriculture to log a complaint directly, or call LRAPA and have your complaint forwarded to the ODA. LRAPA recommends making complaints directly to the ODA to ensure all complaints are reported to the Governor's Office. We recommend you include your name and contact information when leaving your complaint with the ODA. Anonymous complaints may not be reported to the Governor's Office. Your comments and complaints provide supplemental information on the extent and location of smoke problems. You may receive a tape-recorded message asking you to leave a message describing the problem. Remember to leave your name and contact information as well.

To log a complaint, call:
ODA Eugene complaint line: 541 686-7600
ODA Salem complaint line: 503 986-4709
ODA Smoke Management
Program line: 503 985-4701
LRAPA complaint line: 541 726-1930

Other contacts:
Governor's Citizen Call Line: 503 378-4582
Environmental Quality Commission: 1-800-844-8467
Oregon State Legislature citizen comment Web site
http://www.leg.state.or.us/writelegsltr/

The 2008 Perseid Meteor Shower

From science@nasa.gov

The 2008 Perseid meteor shower peaks on August 12th and it should be a good show.

“The time to look is during the dark hours before dawn on Tuesday, August 12th,” says Bill Cooke of NASA’s Meteoroid Environment Office at the Marshall Space Flight Center. “There should be plenty of meteors — perhaps one or two every minute.”

The source of the shower is Comet Swift-Tuttle. Although the comet is far away, currently located beyond the orbit of Uranus, a trail of debris from the comet stretches all the way back to Earth. Crossing the trail in August, Earth will be pelted by specks of comet dust hitting the atmosphere at 132,000 mph. At that speed, even a flimsy speck of dust makes a vivid streak of light when it disintegrates — a meteor! Because, Swift-Tuttle's meteors streak out of the constellation Perseus, they are called “Perseids.”

A Perseid meteor over Joshua Tree National Park in California, August 11, 2007. Credit: Joe Westerberg.

(Note: In the narrative that follows, all times are local. For instance, 9:00 pm means 9:00 pm in your time zone, where you live.)

Serious meteor hunters will begin their watch early, on Monday evening, August 11th, around 9 pm when Perseus first rises in the northeast. This is the time to look for Perseid Earthgrazers — meteors that approach from the horizon and skim the atmosphere overhead like a stone skipping across the surface of a pond.

“Earthgrazers are long, slow and colorful; they are among the most beautiful of meteors,” says Cooke. He cautions that an hour of watching may net only a few of these at most, but seeing even one can make the whole night worthwhile.

A warm summer night. Bright meteors skipping overhead. And the peak is yet to come. What could be better?

The answer lies halfway up the southern sky: Jupiter and the gibbous Moon converge on August 11th and 12th for a close encounter in the constellation Sagittarius. It's a grand sight visible even from light-polluted cities.

For a while the beautiful Moon will interfere with the Perseids, lunar glare wiping out all but the brightest meteors. Yin-yang. The situation reverses itself at 2 am on Tuesday morning, August 12th, when the Moon sets and leaves behind a dark sky for the Perseids. The shower will surge into the darkness, peppering the sky with dozens and perhaps hundreds of meteors until dawn.

For maximum effect, “Get away from city lights,” Cooke advises. The brightest Perseids can be seen from cities, he allows, but the greater flurry of faint, delicate meteors is visible only from the countryside. (Scouts, this is a good time to go camping.)

The Perseids are coming. Enjoy the show!