

Central Arkansas Astronomical Society

The Observer

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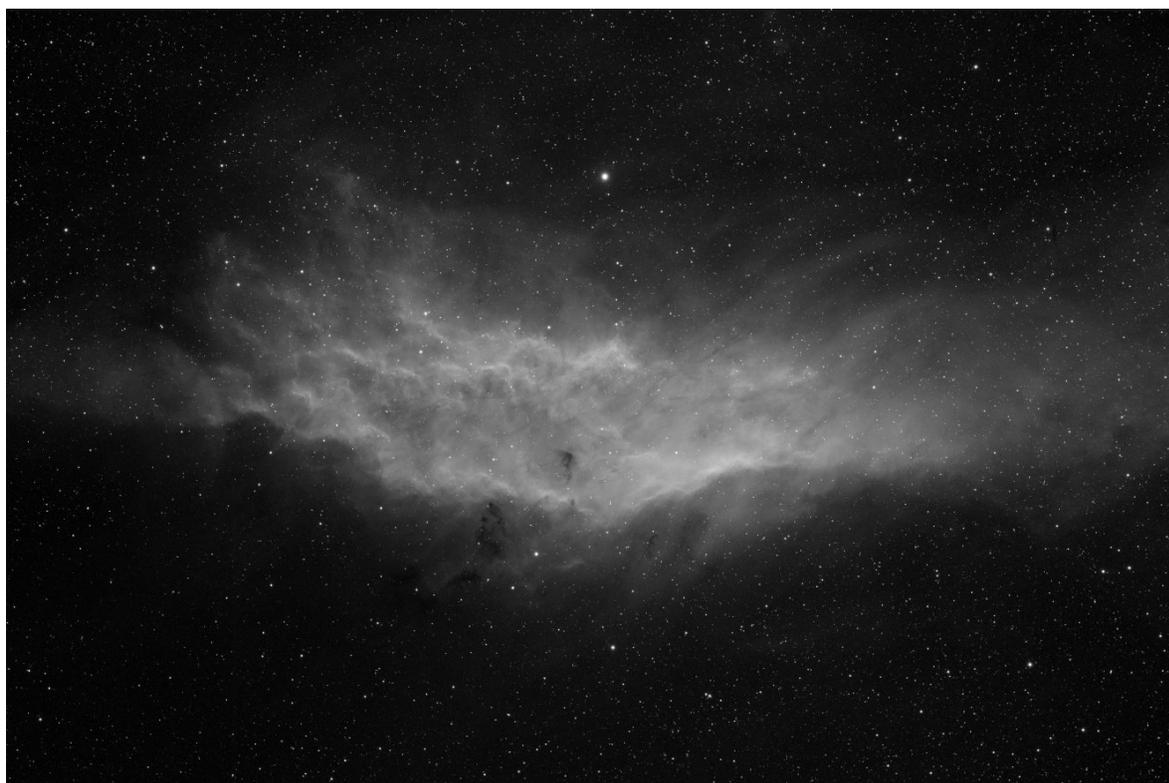
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NGC 1499 the California Nebula, details on page 2



Inside this issue:

May Meeting	2
A Heapin' Helpin' of Hospitality	2
Picture of the Month	2
April Board Meeting Minutes	5
Calendar	5
April Meeting Minutes	6
Bino-Scope Update	6
Update on East Observatory Renovation	7
Bio—Meet Chris Lasley	8
Close Up on Coma Berenices	9

Astronomy Day 2007 - A Stellar Success!

By Stacy Edwards

Crystal clear skies greeted 175+ visitors who came out for this year's Astronomy Day event at Pinnacle Mountain State Park -- the only clouds present were inside the Wilson cloud chamber, which Carl Freyaldenhoven set up to demonstrate cosmic rays!

Park staff and CAAS members welcomed a steady stream of visitors throughout the afternoon and evening. Daytime guests enjoyed viewing the sun safely through a Coronado 40 mm telescope provided by Bill Sanders. (When I took a peek, there was a CME loop visible at the 2:30 position, which was a first for me!) Youngsters had a great time chasing and popping giant bubbles, which have become a CAAS Astronomy Day specialty, and many folks took a break inside the park's Visitor Center to enjoy John Reed's talk on a multitude of astronomical topics, including a demonstration of Stellarium - an awesome, free planetarium program, which is available for download here: <http://www.stellarium.org/>.

Continued on page 4



*An Eastern Fence Lizard
suns lazily on a deck railing*

May Meeting

All are invited to River Ridge Observatory on May 12th! Since this meeting will occur during the RRAC get together (next article) and we know several members will be attending that, we've decided to not have a presentation or the normal business portion and instead get straight to the observing! If you want to just come and visit or tinker on scopes and observe, please come on.

If you would like a map & directions to River Ridge Observatory, please just drop an email to: info@caasastro.org. Hope to see YOU there!

A Heapin' Helpin' of Hospitality! By Stacy Edwards



The Red River Astronomy Club has once again extended an invitation to all interested astronomers to their lovely property just west of Nashville, Arkansas for a multi-club meet on May 10-12. Camping is available on-site, and the clubhouse is always stocked with plenty of cappuccino and cookies. This will be a relaxed event - no scheduled speakers, no catered meals, no door prizes - just good astronomy and friendly fellowship. Check out the club's website at <http://www.rrac.org> for directions and details. Beautiful, wide-open skies and the warmest of hospitality await us!

Lasley Observatory 3.0 By Chris Lasley



For my third observatory I return to CAAS and the hallow grounds of the River Ridge Observatory (RRO). A small 8' x 8' deck supports my HD6T Home Dome and assorted equipment. The basic framing is done and the pier foundation has been poured. I should be able to get the deck framed up and ready for the dome in next couple weekends. With any luck I'll be ready for action in a month or so.



On the Cover— The California Nebula



NGC 1499 - The California Nebula

3 x 40 minutes exposures were calibrated with master flat and dark frames. Each frame was registered, normalized, masked and summed using CCDStack. Frames were captured using an SBIG STL-11000M and a 6 nm Hydrogen-Alpha filter through a Takahashi FSQ-106N atop a Takahashi EM-200. Imaged from the backyard in Conway, AR.

Image by Chris Lasley

Astronomy Day, 2007

Images by Stacy Edwards and Jim Dixon



Astronomy Day 2007 - A Stellar Success! (continued from page 1)

As the sun began to set, a wide variety of telescopes were set up in the parking lot, including Dobsonian-mount reflectors, refractors, and SCTs. Don Lewis had even brought along his unique reclining bino-scope, which inspired many questions and comments from visitors as well as curious club members!

Venus was the first planet to become visible, spotted in the western sky by Kyle Edwards before the sun had completely disappeared. The lovely crescent moon hung nearby, described by Chelsea Reed as a "Cheshire Moon" because of its smile-like position.

As the evening darkened, visitors enjoyed observing many different astronomical objects through the various types of telescopes, each of which had a line of folks eager to enjoy the view through the eyepiece. The undisputed star of the show was visible directly overhead - Saturn! Young and old alike OOOOH'ed and AAAAH'ed as they glimpsed this majestic ringed planet, whether for the first time or for the thousandth time.

Rain or shine, Astronomy Day has always been a day for making new friends. We enjoyed meeting many families and also teens who have an interest in this wonderful hobby. We also enjoyed meeting Robert Brown and Jim Fisher, two club members from the early 1970's - back when the club was known as MARS. The hobby of astronomy is truly a rich and varied world, filled with people from all walks of life and all degrees of interest. We welcome all of our new friends - and "old" ones! - to join us for upcoming meetings and activities.

All in all, 16 CAAS members came out to share their love of astronomy: Pat and Sandy Morris, and their grandchildren Sam and Caroline; Jim Dixon and his daughter, Samantha; Carl Freyaldenhoven; John Reed and his daughter, Chelsea; Rocky Togni; Don Lewis; Bill Sanders; Allen and Mary Francis Lee; Coy Scott; Stacy and Kyle Edwards; and Don and Carolina Ferren (who enjoyed making and sharing tiny origami stars with members and guests.)

We would like to extend a great big THANK YOU to the warm and friendly staff at Pinnacle Mountain State Park for having us, and also to ALL of the folks who came out to participate in the activities and view the heavens with us. We look forward to Astronomy Day 2008 - another opportunity to share our passion for this wonderful hobby!

-- Stacy Edwards, CAAS Secretary

Bedford's Lunar Eclipse Contest

On April 23rd, Jim Dixon got a call from Bedford Camera and Video informing him that his image of the March 3rd eclipse over the Clinton Presidential Library (featured in the April issue of the Observer) had taken First Place in their statewide Lunar Eclipse Photo Contest. Congratulations Jim and thank you Bedford's for holding this contest. A full size version of the image can be found here <http://tinyurl.com/2w5jlp>



Minutes from the April Board Meeting

The major topic of discussion was a proposed storage building for tools so that those tools could be moved out of the East Observatory. John brought a list of several buildings for us to review. We decided on a 7' x 7' x 7.9' "Big Mac" building from Rubbermaid and Home Depot. The building promised 60 minute assembly which we intend to hold them to. The vote was unanimous. Then we braved the cold and dreary weather to walk around the property to find a location. We decided on a spot to the east of the classroom for it. This will give the building some shelter (trees) and cover (trees) to make it less intrusive. We decided on a work party May 5th, 2007 to assemble the building.

Afterward, we discussed preparations for Astronomy Day and other upcoming events.

Submitted by Jim Dixon

May 2007

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2 Full Moon	3	4	5
6	7	8	9	10 Last Qtr Moon	11	12 CAAS Meeting
13	14	15	16 New Moon	17	18	19 Venus & Moon
20	21	22	23 First Qtr Moon	24	25	26
27 Moon at apogee	28	29	30 Vesta at Opposition	31 Full Moon		

Schedule of Events—May 2007

- May 2 —Full Moon
- May 10—Last Quarter Moon
- May 12—CAAS Regular Meeting
7:00 p.m.
- May 16 —New Moon
- May 19 — Conjunction of the Moon
and Venus
- May 23— First Quarter Moon.
- May 27 — Moon at apogee
- May 30 —Vesta at opposition
- May31 —Full Moon

Other Upcoming Events

- July 21– Woolly Hollow Star Party
- July 28—Pinnacle Moon Party
- Aug 18—Pinnacle Star Party
- Sept 15—Pinnacle Star Party

Minutes from the April Meeting

Rocky Togni called the meeting to order at 7 PM. Due to the dreary weather there were only 9 members in attendance.

To warm up the audience, John gave a demo of Stellarium (<http://www.stellarium.org>), a freeware planetarium program. We're not sure how many objects are in its database but it appeared to make a first rate teaching aid.

Rocky asked if we should cancel the May 12th meeting due to RRAC get together happening on the same weekend. We decided that even though some members would be attending we should not schedule our meetings around other groups activities.

Upcoming Events

- The Episcopal Collegiate School group will be visiting CAAS on Monday, April 16 at 7:30. Several members committed to being there to help.
- There is a Girl Scout outing at Camp Storywood on Friday the 19th but they only just asked for our assistance and no one could commit to helping this time around.
- There is a Boy Scout group coming to CAAS on April 28, camping overnight. Rocky has asked for assistance.
- There is another Boy Scout outing at the Capital on May 12th. Rocky has asked for assistance with that as well.
- Astronomy Day is coming up on April 21 from 2 PM to 10 PM. We need to print CAAS business cards, Moon Maps, copies of the Observer, and other handout materials.

Pat gave the Treasurer's Report.

Bill Sanders has received a Comet Observer award from the Astronomical League. Way to Go, Bill!

Rocky gave a presentation on the evolution of the calendar. From humble beginnings of how many harvests old you are to a 365 day Egyptian calendar to a 365.25 Julian calendar. After 1500 years, that Julian calendar was out of synch with the seasons by 11 days due to a lower order discrepancy and so the Gregorian Calendar skipped those 11 days and corrected the error. The Gregorian Calendar was slowly adopted and is in use today. Other calendars were reviewed as well.

Submitted by your auxiliary back up secretary, Jim Dixon



Update on East Observatory Building Restoration by Wade Van Arsdale

Work is nearing completion on the East Observatory Building, to make it more user-friendly for the club during star parties and special events. Over the past few weeks, with the help of several club members, a high grade oil-based primer and latex top-coat was applied to the building's exterior siding in an attempt to preserve it for a few more years. The roll-off roof support beams were also repainted and repaired to increase the support capacity for the roof.

In the coming days, the large 75 inch steel pier that formerly housed the club refractor will be unhooked and removed to storage on-grounds. It will be left intact so it can be put back into use later if needed. The concrete bolts left behind in the floor will be used to anchor the new pier that has now arrived. The current electrical hookup for the pier is going to be retained and re-boxed for use on the new pier. The new pier is a 10 inch steel Paramount 36 inch pier by Software Bisque that is capable of carrying up to 300 pounds of telescope and counterweight payload. The use of the shorter pier will provide for easier and safer use at star parties by club members and the public because it will no longer be necessary to climb up a ladder to observe through the telescope. The telescope will also be more wind-sheltered by the observatory walls from the lower pier-height, which should make for improved imaging results when conditions are windy. The disadvantage of the retrofit pier is we will lose about 20-30 degrees of viewable horizon, but this loss is minimized because the tree canopy and light domes present in the area made that part of the sky only marginally useable anyway.

The Paramount pier should be installed in the next week or two. A Ken Milburn equatorial wedge is currently on order and should be here by mid-May to install on top of the Paramount pier. The wedge will accommodate all Celestron CPC fork mount telescopes and may also be compatible with some Meade LX and older Celestron NexStar fork mount scopes. We will not know about compatibility with these other models until it arrives.

Interchangeable pier-top adapter plates and a 12 inch tall by 8-inch diameter pier extension to accommodate a refractor telescope are now being cut and drilled at the machine shop. These should be ready by mid-May. Once all parts are available and have been installed, a Celestron CPC-800 fork mount SCT telescope will be made available on loan to the club for selected special events and star parties held on C.A.A.S. property. The building is already equipped with Ethernet networking cable to provide a link to the classroom for fully robotic imaging from the observatory. This connection will be preserved and enhanced if needed for future robotic imaging through telescopes housed in the observatory.

May Member Bio — Meet Chris Lasley

1) *When did you first become interested in astronomy?*

I guess you could say I've had a latent interest since I was a child. The interest moved from latent to obsession around 1991 when I took a descriptive astronomy course in college. I went on to take every astronomy course offered along with a few special projects classes.



2) *Do you recall the first object that took your breath away?*

Had to go back to my Norton's 2000 for this one. Norton's was my first astronomical reference. I used the inside cover pages to take notes of my first memorable observations (it was handy). There along with several other notes is an entry, "Saw ring nebula 1st time on 10/18/90 @ UCA Observatory 23:15 CST - GREAT NIGHT". To this day mention of the ring nebula takes me back to that night.

3) *What is your astronomical specialty (imaging, sketching, etc.)?*

For me that would be illustrative imaging (aka pretty pictures). There's a blend of science and art that comes together to feed both sides of the brain. Where else can you obsess over details as mundane as pixel sampling, quantum efficiency and image calibration coupled with composition, tonal balance and presentation? Plus it's a gear head's dream!

4) *What kind of telescope was your first? What equipment do you use now?*

I started out with a used Celestron Super C8 Plus. That quickly turned into a 13 inch Dobsonian which turned into...well, way more telescopes than I can remember. At the moment I've settled in with a Takahashi EM-200 German Equatorial mount carrying a Takahashi FSQ-106N refractor. I image using an SBIG STL-11000M CCD camera typically through a Hydrogen Alpha filter. The scope and camera combination yields a image field of view approximately 2.5 x 4 degrees - great for big emission nebula!

5) *How long have you been involved with CAAS (previously MARS)?*

I joined MARS (soon to be CAAS) in 1991 along with a college friend, Ricky Bartlett. Shortly after that I ran into David Reynolds and the three of us were dubbed "The Conway Group". Ricky moved on, David and I stuck.

6) *What do you do for a living?*

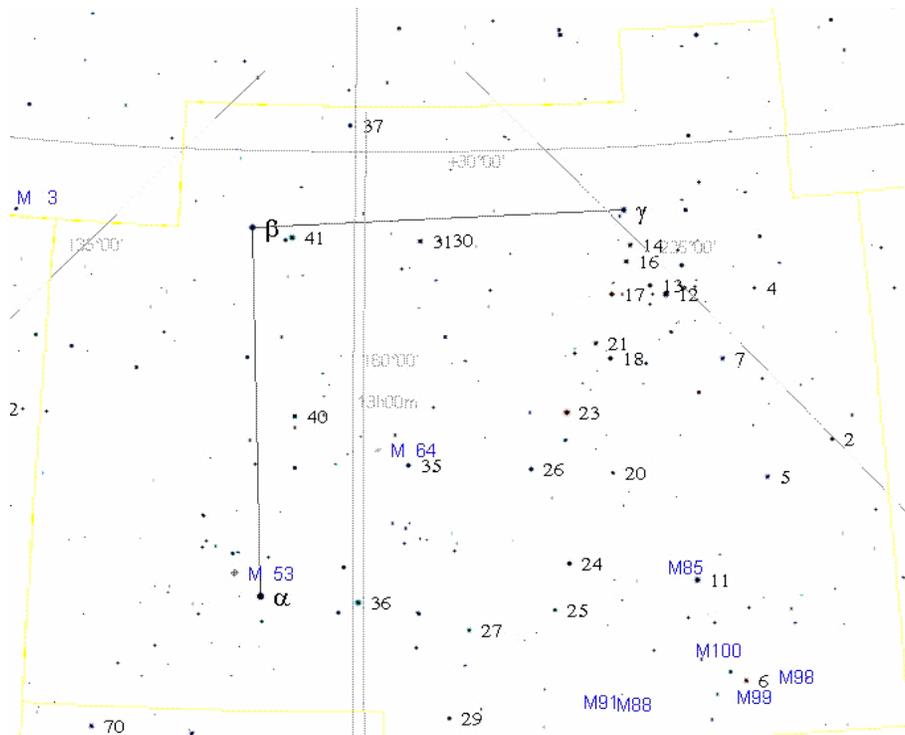
I'm an IT Manager for a financial services company. I work with a team of web designers to build, maintain and support web based applications.

7) *And, what other hobbies do you enjoy?*

That's a loaded question. <g> I tend to get myself spread too thin between all the interests I have. Besides astronomy, I'm an avid beer brewer, guitar hack, woodworker and reef aquarium enthusiast. I'm just thankful I found Beth who puts up with it all!

(Thanks Chris!)

Close Up On Coma Berenices by Jim Dixon



Coma Berenices (Berenice's Hair) is a small but action packed constellation situated between Leo and Bootes. It is best viewed in late spring. Coma Berenices is the home of two well known clusters, a star cluster and a galaxy cluster.

- The Coma Star Cluster is one of the largest star clusters in the sky and is completely lost in a telescope. Use binoculars or your unaided eye. The cluster lies about 250 light years away.
- The Coma Galaxy Cluster (or more precisely, the Coma-Virgo Galaxy Cluster as it spills over into that constellation) is the prototype for rich clusters of galaxies. It contains over one thousand members including many Messier objects. On the Coma side of the border, lie six Messier galaxies – M85, M88, M91, M98, M99, and M100.

Outside of the cluster but still in Coma are two more Messier objects –

- M64 the popular “Black Eye” Galaxy so called for a prominent dark lane.
- M53 is a globular cluster that can be partially resolved in a six inch telescope. It forms a pair with nearby NGC 5053 which is a very loose globular or very rich open cluster.



Website: www.caasastro.org
E-mail: info@caasastro.org

The Central Arkansas Astronomical Society strives to connect the people of Central Arkansas with their universe by promoting amateur activities for its members and by providing information and programs to the general public. Membership offers monthly programs, special outings, and the opportunity to share this hobby with others. No one is under qualified for membership. Experience levels range from novice sky watchers to skilled observers. C.A.A.S. is a proud member of the Astronomical League and the Night Sky Network.

The Sky in mid
May 2007 at 8
PM CST from
35° North
latitude

