

### Next TCC Club Meeting Friday March 30 7:00 PM

Dr. William Caire – Director of the Selman Living Laboratory and Observatory

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### President's Message by Ann Bruun

This spring the Astronomy Club of Tulsa has been awarded a volunteer grant from Scripps Howard Foundation. The money will be used to purchase a projector and a laptop computer. With this equipment we will be able to give presentations at the observatory during public star parties and anywhere we are hosting a group interested in Astronomy. Our outreach will definitely be enhanced by this grant.

The Messier Marathon is March 24<sup>th</sup>, next Saturday, at TUVA. Be sure and read the article describing the marathon below and remember you do not have to stay all night. My first year I only made it until about 1:00 AM. You can also bring a cot to set up in the clubhouse and get some sleep. The marathon is definitely a challenge but the camaraderie is what really makes it worthwhile.

#### **Open Positions:**

We have two open positions I would like everyone to consider. The Group Director and the Newsletter Editor. Teresa and Jerry have each done a fantastic job in these positions respectively but unfortunately paid work has encroached and they are both having trouble finding time to fulfill their volunteer tasks the way they would like to.

The **Group Director** is responsible for coordinating with groups that contact the club for special visits. The Director gives information and sets up times and places for observing sessions. He or she also coordinates the volunteers who will help with various groups.

The **Newsletter Editor** is responsible for publishing our monthly newsletter. The job involves collecting material, much of which comes from club members, and arranging the content for publication.

If you have any questions about either position don't hesitate to ask Teresa or Jerry. Also you can email me at <a href="mailto:act\_pres@astrotulsa.com">act\_pres@astrotulsa.com</a>

# Friday March 30<sup>th</sup> TCC NE Campus 7:00 PM

**Guest Speaker** - Dr. William Caire of the University of Central Oklahoma – Director of the Selman Living Laboratory and Observatory. Dr. Caire is the driving force behind the creation of the Selman Living Laboratory. SLL is a field research and teaching facility located in Woodward County. The facility provides hands on field study opportunities for students from several universities. Dr. Caire was instrumental in procuring the land and creating the laboratory field station which includes bunkhouse facilities, telescopes and observing domes. Dr. Caire is a biologist who specializes in bats and rats. Learn More at <a href="http://www.biology.uco.edu/SelmanLL/index.html">http://www.biology.uco.edu/SelmanLL/index.html</a>

At our **May 4** meeting NASA High Energy Astrophysics Education Ambassador, Neta Apple, will be making a presentation on Extra-Solar planets. As one of our former members we'll be looking forward to welcoming Neta back to Tulsa.



### **Selman Living Laboratory and Observatory**

#### **COMING EVENTS**

Date	Program	Location	Time
3/23	Members Observing Night	<b>ACT Observatory</b>	7:00 PM
3/24	Messier Marathon - see details in article below	TUVA Observatory	3:30 PM to Dawn
3/30	Club Meeting	TCC NE Campus	7:00 PM
	Dr. Dr. William Caire – Selman Living Laboratory & Observatory		
3/31	SideWalk Astronomy	Bass Pro in BA	7:45 PM
4/13	Public Observing Night	<b>ACT Observatory</b>	7:30 PM
4/20	Members Observing Night	ACT Observatory	7:30 PM
5/4	Club Meeting	TCC NE Campus	7:00 PM
	Neta Apple - NASA Education Ambassador – Speaking on Extra-Solar planets		
5/6	SideWalk Astronomy	Bass Pro in BA	8:00 PM
5/11	Public Observing Night	<b>ACT Observatory</b>	8:00 PM
5/18	Members Observing Night	ACT Observatory	8:00 PM

President: Ann Bruun 918-231-0301
Vice-President: Tony White 918-231-0900
Secretary Tamara Green 918.851.1213

Treasurer / Membership questions: John Land 918-695-3195

**Observatory Caretaker** Chris Proctor 918-810-6210 **Group director** –OPEN acting director Chris Proctor

Observing Chairs: Tamara and Owen Green 918.851.1213

**Newsletter Editor: OPEN** 

**Spring Planets** Spring is upon us and the planets are putting on a grand show. **Venus** and **Jupiter** dominate the western sky after sunset. A waxing crescent moon can will pass near Jupiter on Mar 25 and Venus Mar 26. Venus the brighter and higher of the two reaches its greatest evening height on March 27 and passes near the Pleiades star cluster on April 4. Red Orange **Mars** in Leo is well up in the east at sunset and transits high in the south around 11:00 PM A bright gibbous moon passes well below Mars on April 3. Next **Saturn** rises in the SE sky after 9:30 PM Look for a pair of fairly bright "stars" about 5 degrees apart. The brighter of the two on the left is Saturn which appears to have slightly yellow hue. The star Spica in Virgo completes the pair to the right. The full moon joins the pair on April 6 <sup>th</sup>. Next Saturn comes to opposition on April15th. This year the rings are much more visible and will put on a great show all summer. So pay your taxes early so you can go observing! Finally to warp up the Spring show we will have a partial eclipse of the sun on Sunday evening May 20 starting about 7:30 PM. And the long awaited transit of Venus in front of the Sun takes place on June 5<sup>th</sup>.

### Great weekly sky shows for of all ages

**Stargazers online** A weekly online video of things you can see with the naked eye. These 5 minute video segments feature events that anyone can enjoy by merely going outside and "Looking Up"! <a href="http://www.stargazersonline.org/">http://www.stargazersonline.org/</a>

**Skyweek** from Sky and Telescope Magazine also presents a variety of astronomical events for the naked eye as well as telescope viewing.

http://www.skyandtelescope.com/videos/skyweek

Let's Go Stargazing <a href="http://www.skyandtelescope.com/letsgo">http://www.skyandtelescope.com/letsgo</a>
Lots of activities and information for families and novice astronomers.

#### **Dark Site Committee Report – Brad Young**

The Dark Site Committee has continued the search over the winter for a new observing site for our club. We have contacted the Bartlesville club and discussed perhaps working together to identify a site. We have also put together a survey for the general membership, to be posted to the website, that asks pertinent questions to help identify a site that will be of the most use to all. With spring approaching, we hope to be more active in this endeavor and look forward to input from the membership. A survey will be going out to the membership later to get you input and ideas.

# 21<sup>st</sup> ANNUAL MESSIER MARATHON

Sat March 24

Caravan will leave Broken Arrow 3:30 PM from Burger King Details below Contact Ann to let her know you are going act\_pres@astrotulsa.com

#### Messier Marathon Time! By Ann Bruun

It's that time of year again, Messier Marathon time. For those of you who are new to astronomy the March Messier Marathon is a magical time when it is possible to see all 110 Messier objects in one night. There happens to be a small segment of the sky that does not

have any Messier objects. When the sun is in that area, theoretically, you can see all the Messiers in one night. Truth be told, all 110 aren't usually available for us, a few will be just be too close to sunset or sunrise to see, but we can get close.

The marathon is a competition, sort of — who can find the most Messiers. What it really is though is a chance for us all to get together, try to stay up all night and go crazy observing Messiers. It's like a star studded endurance race for amateur astronomers.



If you are new to observing don't be intimidated, it is a fun and wonderful adventure. Watching the sky turn throughout the night and looking for targets is great experience. The Messier marathon is not the time to do serious observing. You basically jump from object to

object as fast as you can.

Be sure to bring all your warm clothes, it gets cold in the wee hours of the morning. Also bring snacks to help you stay awake, peppermint is good, coffee, jerky anything that will pep you up. The hardest part for me is staying awake. If you can't make the whole night some people bring a tent, or cots or just hang out on the large couches for a power nap.

The marathon this year will be held at TUVA Observing field on Saturday March 24<sup>th</sup>. TUVA is the observing club located at Ron and Maura Wood's house near Council Hill,



Oklahoma. They have offered to host the marathon for 21 years now and I can't imagine it anywhere else. The observing field is pastureland so setting up on a tarp is a good idea. Also since we've had a warm spring some insect repellent might come in handy. They also have a nice clubhouse where you can get inside for breaks or, as we did during the fall Messier last year, to dry the dew off your eyepieces and finder scopes.

You never know what is going to happen during the marathon, they are all different. The fun part is sharing the experience with others and building friendships. We usually form a caravan and head down to TUVA in the afternoon. Everybody contributes to a grand potluck dinner before setting up our equipment for the evening.

Tamara Green has updated Tom's charts from last year to apply to this year's marathon. So print them off and bring pencils and clip board to keep track of your progress. You can find the object order lists and finder charts on the AstroTulsa Yahoo Group. Follow the link listed below. There is also a link to additional information and sources. If this March Messier madness sounds like something you would be interested in mark your calendars and get ready. There will be a caravan leaving from the Burger King at the Broken Arrow expressway and Elm at 3:30 PM Saturday March 24<sup>th</sup>. We will convene at TUVA for a potluck supper around 5:00 PM and then get set up for a night of observing. Please RSVP with Ann so we don't leave you behind act\_pres@astrotulsa.com

**List and Charts** http://groups.yahoo.com/group/AstroTulsa/attachments/folder/0/list **Guide to the Messier Marathon** http://www.richardbell.net/marathon.html

TUVA Website http://www.tuvaclub.org/

Images of Past Marathons http://astrotulsa.com/Gallery/gallery.asp



# Observe-ing in a Sling By Brad Young

For years, I had put off shoulder surgery, dreading that the recovery might slow me down from my two hobbies, astronomy and guitar. Finally, this autumn it became necessary. Luckily for the neighbors, I have found no way yet to play my axe in a sling. Luckily for me, I have found a solution for observing.

Although I have not yet dared to use my Orion Classic XT 12" Dobsonian, I was able to continue to use binoculars by switching from the handheld 12 x 60 Garrett binoculars I have used for years to Garrett

Gemini LW 20  $\times$  80 binoculars on a Series 500 fluid pan head and tripod. The head allows smooth alt-azimuth motion with two handles, which I adjusted to reach with my good hand.

After only a few weeks of using this setup, I am still learning to use it. But I was able, with the help of Garrett Optical, to get the equipment quickly (despite UPS's best efforts to lose it) and set it up just before the procedure. Only three days after surgery, I was able to observe satellites, check on Jupiter's moons, and even see a few deep sky objects. I enlisted my son, Gus, to help me carry the equipment and set it up, and/or left it in the back yard partially assembled if I was going to observe before dawn.

A fellow observer (Derek Breit ) wrote me about his setup, which could be easily adapted for one handed use: "For binocs I use a telescoping handle and a drywall sanding pad (with no sandpaper). Makes an awesome monopod. And, if previously adjusted for say 50 degrees elevation while standing and the base of the handle say a yard away from you, you can easily

adjust it on the fly by just lifting and the pole will land at your feet and you can steadily view the Zenith. Alternatively you can just step forward or backward. If you're binocs are not too heavy, should work fine with one hand, especially if you strap the optics to the pad."

Although I didn't use this myself, it sounds like a very useful contraption.

I found there is useful and fun astronomy to be done even with physical limits. My usual observing can be quite hard-core at times, and this period has led me to simpler joys such as watching the dance of the planets, the journey of the moon each month, and solar observing by projection on a white sheet of paper, using a lightweight refractor I can set up with one hand. Venus and Mercury recently had a nice apparition in the sunset.

The Astronomical League offers several observing programs that do not require optical aid, as listed at http://www.astroleague.org/al/obsclubs/EquipmentObservingClubs.html



Recently, they have added an Analemma Club, which is described at: <a href="http://astroleague.org/Analemma\_Introduction">http://astroleague.org/Analemma\_Introduction</a> and can be done with little or no equipment, and with the naked eye. The Analemma is a figure 8 pattern traced by the Sun throughout the seasons. It can be observed by taking an image of the sun or marking the shadow of an object at the exact same time of day throughout the year. I built the device suggested on the site one-handed, and have been able to do all the activities in a sling. After using the device for a while, I've switched to using my office building to provide the needed shadow, and only need to use the one hand to snap photos on my cell phone. <a href="http://www.analemma.com/Pages/framesPage.html">http://www.analemma.com/Pages/framesPage.html</a>

This adventure led me to wonder what options are available for people who love astronomy, but have physical requirements, either temporary or permanent, that need to be addressed in order to enjoy the hobby. It turns out there is a multitude of solutions available, and based on the abilities of the hobbyist, almost anything can be done with a little forethought. A very informative article appears at: <a href="http://www.cloudynights.com/item.php?item\_id=1907">http://www.cloudynights.com/item.php?item\_id=1907</a>

### **Regional Summer Astronomy Events**

Summer is the time Astronomers like to get away and visit dark skies or attend conventions with fellow star enthusiast from around the country. Here are some up coming events.



2012 MidStates Regional Convention.

June 1<sup>st</sup> to June 3rd in Kansas City

Our Tulsa club is a member of this 5 state region called Midstates

Early registration is Due by May 15<sup>th</sup> Details at.

http://msral.org/



Celebrating 150 years of the
Astronomical League
National Convention July 4 to July 7
http://alcon2012.astroleague.org/

This year AlCon convenes in Chicago. In addition to great speakers and meeting fellow astronomers from all over the world. This year's venue includes side trips to such iconic places a Yerkes observatory, Adler Planetarium and particle accelerators at Fermilab.

### Star Bright – Star Light – Where shall I pitch my tent tonight?

Making plans for your summer travels. Here are a few places to pitch your tent. Actually several also have more comfortable lodgings on site or nearby.



29<sup>th</sup> Okie-Tex Star Party Sept 8<sup>th</sup> to Sept 16<sup>th</sup> <a href="http://www.okie-tex.com/">http://www.okie-tex.com/</a> Details for registration and meals at website.

Dozens of our Tulsa members join with more than 300 fellow astronomers each fall to marvel at the dark skies in the tip of the Oklahoma Panhandle. Al Nagler of Tel-Vue optics proclaimed it as one of the darkest sites in America.

Get your registrations in early. Especially for the on site meals. Since the nearest eating places are nearly 40 miles away.

Other regional Star parties include: This is by no means a complete listing.



Rocky Mountain Star Stare June 13 to June 17 http://www.rmss.org/index.htm



Nebraska Star Party July 15<sup>th</sup> to July 20<sup>th</sup> http://www.nebraskastarparty.org/index.html



Heart of America Star party near Butler, MO Oct 10 to Oct 14 http://www.hoasp.org/

## March 2 General Meeting minutes by Tamara Green

The meeting was held at Tulsa Community College, Northeast Campus.

#### WELCOME AND INTRODUCTION:

Ann called the meeting to order at 7:10 and welcomed all attendees. There were 30 attendees. She then introduced the guest speaker for the evening and turned the floor over to him.

**PROGRAM:** John Land, Treasurer, "Observing the Sun and Sunspots". John gave a presentation on observing the sun and sunspots and how to make a solar filter.

#### **OFFICERS'/STAFF REPORTS:**

**PRESIDENT-** Ann has pamphlets for Nebraska Star Party if anyone is interested. It is near South Dakota, Jul 15-20.

**VICE PRESIDENT-** Tony not here. No report.

**SECRETARY** – Tamara read the minutes from the February General Meeting shortly after Ann called the meeting to order.

**TREASURER** – John reported that we have 2 new members, 38 web guests, He gave a gentle reminder that there are people who need to pay our dues.

**OBSERVING** – Ann announced that since she is President now, she does not have time to do it, but Owen and Tamara Green will be the Observing Co-Chairs. Ann then announced the upcoming events.

**GROUPS** – Teresa mentioned the group from Feb 24 was a fun event. Everyone who attended had a good time. They gave donations as well. The next day, we had the Venture Crew who came out and did service projects, but instead of digging a site for pads, they cleared brush away along the fence line. Some of the kids spray painted boulders that stuck out of the ground with fluorescent paint to mark them. Teresa said that for March, she are making plans for scheduling groups, to make things a little more organized, she will touch more on this at the board meeting.

**FACILITIES** – Chris not here, but Ann relayed the message that we got the OK from Blake to put a gate in between the AT&T parking lot and our field.

**PR/OUTREACH/SIDEWALK** – Owen announced the Sidewalk Astronomy event at Bass Pro on Saturday, Mar 3 at 7:00 PM.

**FUNDRAISING** – We are still working on getting estimates for repairs.

**OTHER BUSINESS:** Catherine Kahbi announced that we were awarded the Scripps Howard Foundation Grant for \$888.87! (For purchase of laptop and video projector)

Ann Bruun adjourned the meeting at 8:50 PM. She announced that there will be a short board meeting following the general meeting, welcomed any members who wanted to attend to stay and attend the board meeting.

# Treasurer / membership report - John Land

The club has **107 members** including **4 new memberships** this year **Richard Emery, James Taggart, Phillip & Lynda Jones and Sid Tryzbiak** In addition we have had 45 people request information on the website visitor section. Congratulations to Clyde Glandon, who has completed the requirements for his Binocular Messier Certificate and award pin

Checking Account \$ 2,411.60 Savings Account \$ 7,998.76 Includes grant money mentioned in minutes. Investment accounts as of Feb 29 \$ 16,067.68 Values will vary due to market values.

**2011 Club Financial Report** will be sent to membership separately due to printing constraints. I apologize for its delay due to lack on newsletter.

This humble attempt at newsletter produced by Treasurer – John Land I wish thank my good friend Jerry Mullennix for the great job he did during 2011 and encourage others in the club to step up to do the tasks that will make our club thrive for another 75 years.