



The Night Sky

The Newsletter of
The Astronomy Club of Akron

www.acaoh.org

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Ramblings of the President

By Glenn R. Cameron

Hello fellow star gazers. I recently went to Detroit Michigan to watch the NCAA Championship game, and whooped it up when my team won. I also took the opportunity to visit the Detroit Science Center. The featured exhibit was, Star Trek: The Exhibit. It was fun to see a mixture of science fiction and science fact. It was part entertainment and part history. I recommend it highly. In addition, I got to add another planetarium to my list. It was a nice system and a fun program, punctuated with two school field trips of surprisingly knowledgeable fifth graders. This was all encouraging amidst a city that was otherwise crumbling right before my very eyes. Sad.

I wanted to add a note to my article from last month. The club found a permanent meeting place back in the '90s due to the efforts of Jim Wood. This effort was lauded at the time. Unfortunately, and through no fault of Jim's, the meeting place was less permanent than was hoped. I want to be sure to remember Millie Eaken's considerable efforts and contacts in the Portage Lakes business community that resulted in our current meeting place at the Kiwanis Club. Fourteen plus years and counting. Thanks Millie!

Outreach requests:

- Minerva Public Library would like a speaker some time in 2009 as part of an astronomy exhibit they are planning for the International Year of Astronomy.
- The Akron Audubon Society would like a speaker on the subject of light pollution at one of their monthly meetings.
-

A 5th grade science class in Coventry would like a presentation about solar system astronomy basics.

Don't forget, 2009 is the International Year of Astronomy. Let us go out and spread the astronomical word!

From Dave Jessie:

April Meeting Information

April 24, 8:00, Kiwanis Center

Lew Snodgrass: "Stars How Big is Big?"

Abstract:

We all know stars are big, but just how BIG are they? Are you aware that over 1 million planet Earths would fit inside our Sun? How large is our sun compared to some of the other stars in our Milky Way? Why are some stars much larger or much smaller than our Sun; what is the difference between a White Dwarf and a Red Giant? Why are stars different colors; what does that have to do with their size?

Come hear Lew tell us all about it!

Bio:

Lew's interest in astronomy began when he was a young boy in Cuyahoga Falls. His first telescope, a humble cardboard-tube Newtonian with a plastic focuser, gave him a view of Jupiter and its moons - a 'wow' moment which ensured his lifelong devotion to stargazing. Later, while studying for his BA in Public Relations at the University of Akron, Lew took an astronomy class taught by ACA honorary member, Phil Hegenderfer, and learned of the ACA. After attending several events, he joined in early 2007.

Cont' on p. 3

Observatory Report

Ron Kalinoski

Daytime clouds gave way to clear skies with low humidity on the evening of our Messier Marathon. John Shulan arrived early to set up kitchen for marathoners who were treated to John's superb chili and good coffee throughout the night. Thirty people attended the marathon with about 15 telescopes set up to view the night sky. The sounds of Verdi and Vivaldi rolled across the observatory grounds to provide the right atmosphere for gazing at the stars. Our annual event went international this year as Steve Rohweder (previous ACA Treasurer) started off the Messier Marathon a few hours earlier in Luxemburg, Belgium. Steve logged 18 Messier objects before winds picked up causing him to shut down his operation. With perfect observing conditions at the observatory, marathoners logged Messier objects into the early morning hours. This year we offered a one year's subscription for Sky & Telescope magazine as a first place prize for the marathoner logging the most Messier objects. Second place finishers received a Messier Marathon Certificate. For the computer-aided telescope class, John Shulan won first place and Lew Snodgrass won second place. For the manual telescope class, Tom & Leigh Alexander won first place with Isabella Rasicci & Fred Huffman finishing in second place. Awards and certificates were presented at our March monthly meeting.

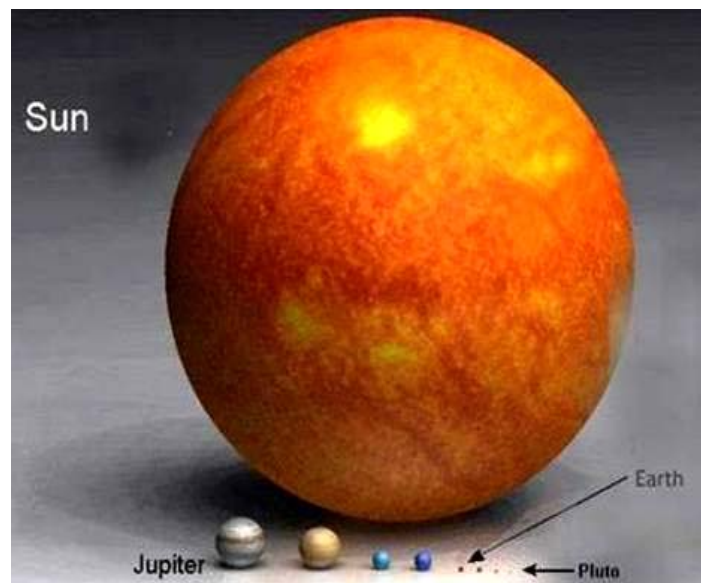
On April 4th, ACA held a cookout and star party at the observatory. This star party was scheduled to coincide with 100 Hours of Astronomy (April 2-5). The International Astronomical Union (IAU) initiated 2009 International Year of Astronomy and their cornerstone project was 100 Hours of Astronomy. This project was a global outreach program with the goal of sharing the wonders of the night sky with all citizens of the planet Earth. The Astronomy Club of Akron wanted to participate in this global event. At 6pm on the evening of April 4th, Lew Snodgrass got the party started by putting hot dogs on the grill and cranking up the heat. Our event was announced in The Beacon Journal. Lou Poda called WNIR and talked to Tom Erickson to advertise our event on the radio. Dave Jessie posted an announcement on his website to reach out to his Friday night stargazers. Members and the public started arriving at the observatory at 6pm to try out Lew's hotdogs. After the cookout, we turned our telescopes to the sky. The featured celestial object was the Moon. With an eight day old Moon, the Straight Wall was within reach of all telescopes set up on the observatory grounds. The 14" telescope located the Straight Wall early and Lou Poda explained to the public the feature they were looking at was a geological fault about 70 miles in length, 1000 feet in height, and about 1.5 miles in width. The shadow cast by the fault makes the Straight Wall appear as a dark line stretching across the lunar surface. The best image of this feature was

shown by John Shulan's Celestron CPC 11. John turned up the magnification to 622X. The Straight Wall at that magnification spanned across one-third the field of view and was very impressive. Thanks to Lew Snodgrass, Mark Kochheiser, and Rob Watkins for managing the cookout.

Special Thanks to John, Pat, and Justin Phillips for donating the baseboard and flashing we attached to the north wall of the observatory. The base of the north wall of the observatory was badly deteriorated and water was entering into the building. The repair of the north wall will help ensure water stays out of the observatory.

April Meeting info, cont'd from p. 1

Lew's arsenal of astro-gear has evolved since his early days of backyard viewing; the small refractor he acquired a few years ago has been joined by a



Celestron CPC1100. Lew has made many contributions to the ACA, including serving as its Treasurer. The Club is proud to have him as a member.

Dave Jessie submitted this article from Dr. Clay Sherrod. We are reprinting it with the author's permission.

TELESCOPE USERS: POLLEN ALERT!!

Reprinted with permission of Dr. P. Clay Sherrod, Director of the Arkansas Sky Observatories.

This article appeared in Message #109282 posted in the LX200GPS Yahoo! group on Sunday Apr 5, 2009 at 5:55 am

I have started getting inquiries with the advent of spring about POLLEN and its affect on coated optics and so it is well worth a reminder here:

I believe that the best (and it is tried and true....) method to remove pollen is the procedure that I have listed at the Arkansas Sky Observatories website:

<http://www.arksky.org/asoclean.htm>

This will cut right through pollen and sap...you are very much correct: there are considerable amounts of sap in every granule of pollen...that and the abrasive burrs are what allows the pollen to stick to its intended surfaces.

Protect Your Investment from the #1 Most Damaging Substance.

We all have problems with pollen irritations in the springtime. Pollen is a pesky little package that - under a microscope - looks like something from the movie "Alien." The same factors that cause human irritations through pollen (itchy eyes, swollen nasal passages, inflamed glands....) are responsible for POLLEN to be the NUMBER ONE most damaging factor of telescope lenses, corrector plates and mirrors.

Right now, the pollen counts throughout the United States have been off the scale due to the unusual climatic conditions of the previous summer and winter. Don't look for things to level out anytime soon, either, as other pollens throughout late spring and early summer will merely replace those we are dealing with right now. Pollen collection on your telescope surfaces will happen whether or not the wind is blowing; the pollen is so lightweight it is easily transported throughout the air; the only remedy is a good rain shower to cleanse the surrounding air, but that is only a temporary fix as the pollination procedure progresses.

Consider the following:

- 1) Pollen is abrasive - it varies, but most pollen grains have "spicules" (or spikes) that protrude like sharp points so that they may adhere to surfaces (such as the wings of a bumble bee); other types have "knobs" which serve the same purpose....there is even a "Velcro pollen" which attaches itself via a "hook" type extrusion to soft surfaces like the hair of a bee or the feathers of a bird.
- 2) Pollen is coated with a sticky emulsion, like the consistency of honey, that intentionally is there to act as a "bandaid" to get it to stick to ANYTHING that it comes in contact with.
- 3) Combine the two above, and you have ONE MEAN CRITTER if it gets on your mirrors, Maksutov lens or corrector plate of your expensive telescope.

DO NOT ATTEMPT TO REMOVE UNTIL YOU HAVE READ THROUGH THIS THOROUGHLY!!

Attempting to remove pollen from the wonderfully-coated glass of our telescopes can be the most damaging and irritating thing that you can do to the telescope. Merely "cleaning", even if you use the right techniques and solutions, will do nothing more than "grind" the pitch-fork spicules into the deep coatings....it is like using steel wool on your corrector plate. YES, it really is.....and pollen is sappy and it will smear when cleaned improperly, simply making things worse.

PLEASE follow the guidelines I have outlined below to protect your investment during this time of massive pollen production....this is NOT dust, folks...it is NOT dew nor fingerprints. It is POLLEN, and it can strike a death blow to your optics if not removed early, and removed properly!

- 1) Protect the telescope from pollen during observing: either use a dew shield while your lens cap is off, or put the cap ON when you have extended periods between "looks;" during the spring of year, you can have a one-component layer of pollen across your corrector plate within 5-7 minutes unprotected;
- 2) Make sure to GET THE POLLEN OFF immediately upon coming in for the night; if you allow the adhesive to dry onto your corrector plate, chances are you MAY not get some of it off; this is particularly true if you allow it to remain on during the hot summer months;
- 3) Carefully remove the pollen and clean per the EXACT STEPS following. NEVER simply clean the lens....always follow these guides when it comes to pollen.

DR. CLAY'S DE-POLLINATOR (patent pending.....not really)

As soon as you are finished observing and the scope is indoors away from open screened windows or doors, remove the lens cap in a darkened room; look at the lens or corrector plate with a flashlight held obliquely (looking across lengthwise) the glass and see all the pollen. You must get that stuff off before it dries and sticks to the glass surface more permanently. Pollen sap remains fluid for a very short period of time and removing will leaves streaks if not done properly. However, once the sap solidifies, it is very much like dried shellac and can be nearly impossible to remove the pollen grains from the dried sap.

- 1) I use a medium-firm flat-edged artist's camelhair paintbrush that is 1" across to loosen particles of dust and pollen from the corrector plate. DO NOT RUB with the brush, merely very gently LOOSEN and fleck off all that you can...some likely will NOT come off in this step. Some will smear across the glass.
 - 2) Once you have done that, use some "canned air" to blow off the loosened particles. CAUTION: You must be careful using compressed air cans on your optics, and some people never tell you this. Be sure to: a) NEVER shake the can; this stirs up the propellant and causes condensation to form which will blow water droplets all over your optics; b) NEVER assume that the canned air will get the particles off without BRUSHING FIRST....if you don't brush, well, your optics will be toast; c) use the canned air only in SHORT bursts, not a continuous stream, as long cycles will result in cooling of the propellant inside the can and result in liquified substances spraying onto your optics.
 - 3) Now, use the optical cleaning solution and procedure described at:<http://www.arksky.org/asoclean.htm>. Kleenex tissues work just fine for this cleaning, provided that you do not "over-use" any one tissue until it becomes limp and begins to shed particles or tiny shreds of paper. Never use scented tissues or those with "softening agents"...only pure white, non-fancy Kleenex brand.
 - 4) Dab the solution sparingly, but enough to wet the surface, without any rubbing at all at this point; this step is to further loosen particles and to begin to break down the tiny stains left by the pollen adhesives....YES, they will still be there.
 - 5) Once the entire glass surface has been daubed down, USING THE SAME KLEENEX, very, very gently begin to wipe (not rub) in a slow circular motion, making sure that any particular area does not become dry at this point. Keep the glass WET at all times...do not allow time to dry.
 - 6) Now that you have wiped the entire surface, get a FRESH Kleenex or two and apply a generous amount of solution TO THE KLEENEX (never to the optical surface) and very gently begin rubbing in similar circular motions, but GO BACKWARDS from step 5); you are actually allowing the detergent to clean off the pollen goo.
 - 7) Repeat with a plenty of fresh Kleenexes, but rub even lighter, just smear some cleaning solution across the glass.
 - 8) With a fresh Kleenex (actually several) that has been "Misted" with pure distilled water (not wet at all, just moist), begin to "buff" every-so-lightly about ¼ of the area of your glass at a time; if you see stubborn stains, or still some pollen debris, merely get another Kleenex and gently rub those areas to remove. Continue until the entire surface has been done.
 - 9) NOW, take a bunch of Kleenex and use TWO at a time (so that the oils in your fingers do not penetrate to the glass) and dry-buff with the lightest possible touch, just like on a vintage automobile. Do this step twice to remove any streaking. Never let the same surface of the Kleenex rub across the buffing surface twice...tissue is cheap. The alcohol is there in part as a drying agent. NEVER use more than a 3:1 ratio of water-to-alcohol, as this can dull your coatings. In the proper solution this cleaner is entirely safe and excellent for you glass and its coatings.
- REMEMBER...as in so many things, prevention is always better and easier than the cure. Protect your optics when you are outdoors. On my portable telescopes I use a pillowcase or cotton sheet and place over the entire telescope when it sits idle for very long on pollen-laden spring nights. I merely remove prior to putting my eye up to the scope each time.

Sound like a lot of trouble?? So is replacing the SINGLE-MOST-EXPENSIVE piece on the telescope.

Dr. Clay

Arkansas Sky Observatories
MPC H45 - Petit Jean Mountain South
MPC H41 - Petit Jean Mountain
MPC H43 - Conway West
<http://www.arksky.org/>

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Newsletter of the Astronomy Club of Akron

c/o Tom/Leigh Alexander, Editors

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For Club information, please visit our website: www.acao.org. Astronomy Club of Akron annual memberships renew in the month of May.

To join the ACA, **or to renew your membership**, please fill out the form below, place in an envelope and mail to:

Lew Snodgrass, Treasurer, Astronomy Club of Akron
1865 Stabler Rd
Akron, OH 44313-6124

Yes! I want to become a member of the Astronomy Club of Akron

(PLEASE PRINT)

NAME: _____ PHONE: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

EMAIL ADDRESS: _____

Please be sure to enclose payment for the membership level desired.

ADULT (ages 18 and older)..... \$30.00 JUNIOR (ages 12 to 17)\$15.00
ADDITIONAL ADULT member \$15.00 FAMILY MEMBERSHIP\$40.00

I realize the full color version of *The Night Sky* newsletter is sent by email to , but I would rather have a B&W version mailed to my address via USPS.