Observer Staff Editor & Publisher: Paul Winalski



Newsletter of the New Hampshire Astronomical Society

Vol. 2012 No. 9

"All the news that fits in print"

ASTRONOMICAL SOCIAL

Stellafane 2012

President's Message

We have a medium-sized club. As is usual for clubs, most members are only intermittently active and a core group does most of the club's activities. In our case, there are about 150 members overall. Of those about twenty are active members who come to the meetings and participate in sky watches and other events. Of those about half are officers or committee members who "run" the club. Some of that last group have been doing their jobs for years. There are more jobs and some of the jobs have gotten harder as the club has taken on other responsibilities like the LTP and as the news about the NHAS has gotten out and more groups want sky watches than ever before.

The consequence for our highlyactive members is "burn out"; the consequence for the less-active members is a reluctance to sign up to more activity. The less-active members see that the official positions involve a lot of work and go on for a long time. They don't want to be overloaded and so reasonably don't volunteer.

So I'm going to ask our less-active members for a limited, one-timeonly, easy commitment. If you haven't been to a meeting in months, come to one—just one! If you haven't been to a sky watch in years, come to one—just one! If you don't want to travel, write up one of your observing sessions, review a piece of equipment or write an article and email it to the Secretary, who is our newsletter editor. I'\'m not asking for the Moon, so this should be easy: do one thing! I think you'll be glad you did.

> ✤ John Bishop NHAS President 2012

Highlights for This Month

NHAS members made their annual trek to the Stellafane amateur telescope makers' convention. We also had several successful public sky watch events and an Astro 101 members' workshop. There was also the fall Messier Marathon and pot luck social hosted by **Scott Wickett** and family.

> ✤ Paul Winalski NHAS Secretary 2012

Stellafane, 16-19 August 2012



Telescopes on the field at Stelleafane (Al Navarro photo)

As always I headed over to the Flea market. I did see the NHAS old canopy with its new tarp and the new pop up tent on the way past. The flea market did seem a little down from last year to me. I did get a couple of 10 lb counter weights I was looking for. I also found a complete set of Tectron Collimation tools for \$25. I have two of the three from previous purchases at Stellafane. What I believe is the original observing guide to the **On the web at http://www.nhastro.com/** Herschell 400 and a 27 MM Panoptic were my purchases. There were a few other items of interest that I either passed on or wasn't quick enough.

I did take the bus to the Pink Club House. Didn't look like there were as many telescopes on display as last year. The most interesting was the replica of Sir William Herschell's telescope he had used to discover Uranus.

The club cookout looked well attended by club members and the food was very good. The new pop up was very useful for keeping the cooks out of the sun. It still seemed a little crowded under the main tent. The clouds had mostly gone with just some "fair weather" clouds around so there was some solar observing going on with the club Lunt and some other member scopes. I left around 3:00 PM and headed home. Even leaving early it was a nice day and now the long wait till next years Stellafane begins!

The next weekend was the New England Amateur Radio Convention held at the Holiday Inn in Boxborough MA. This is an every other year event. Interestingly I heard comments and it seemed to me attendance there was lower then the previous event. So I attended two major "hobby" events on consecutive weekends with what may have been lower then expected attendance. I don't have any confirmed attendance records I do know that Amateur (Ham) Radio Licenses are at an all time high. So low if true attendance at these

✤ John Rose

Well, we survived another Stellafane in Springfield VT. For the early folks, Thursday was ok. Friday it was hot and humid, thundershowers late in the day, and very early Saturday morning. But rest of Saturday, the skies cleared up, things dried out. It was a wonderfully clear evening!!!



The NHAS enclave at Stellafane (Joel Harris photo)

As for the NHAS cookout, I was sick, and my assistant **Andy Jaffe** filled in on the grill duties. He also had assistance from other people too. It was great to have all those NHAS tents, to ward off rain demons and intense sun rays.

Also one of our members unexpectedly won the grand prize there on the raffle: four gargantuan Ethos eyepieces, two neb filters, and a TeleVue hat.

Thanks to all who made our NHAS time there fun.

✤ Joel Harris

Sidewalk Astronomy, Portsmouth NH, 25 August 2012

Although I could not be there, **Tom Cocchiaro**, **Gardner Gerry**, and **Shane Cross** brought scopes and had hundreds if not thousands of visitors. Very successful night!

✤ Ted Blank

Lafayette Place Campground Sky Watch, Franconia NH, 30 August 2012

The sky was clear, but there was low-lying haze being lit up by the full Moon that washed out what otherwise would have been a very dark sky. **Gardner Gerry** and I were there from NHAS. In addition to the Moon, I showed Albireo, 61 Cygni, Polaris, NGC 457, M13, M57, T Lyrae, and V Aquilae. Gardner was able to find M81 and M82 as well. About fifty people attended.

✤ Paul Winalski

Bedford High School Sky Watch, Bedford NH, 13 September 2012

We had a successful sky watch with the Bedford HS students. NHAS members attending: John Bishop, Ramaswamy, Steve Rand, Gardner Gerry, Herb Bubert, Paul Winalski.

Objects I showed: 61 Cygni, M11, M13, M22, Swan Nebula, M57, M31/M32, NGC 457, Perseus Double Cluster, T Lyrae, V Aquilae.

✤ Paul Winalski

There were about twelve students and two teachers so we could show lots of items and talk about them in detail. We were at Benedictine Park in Bedford. This is a nice location with lots of sky visible and no local lights, but it's close enough to Nashua and Manchester that the sky isn't dark—the only bit of the Milky Way I could even suspect was the Cygnus Star Cloud, and that was just barely visible if you knew it was there.

I had my new 4-inch f/13 Skylight achromatic refractor on the IOptron mount. The mount performed really well, finding objects and tracking them despite the weight and length of the refractor. I couldn't look at anything near the zenith, though, because the focuser end of the telescope would have hit one of the tripod legs. I did figure out how to do initialization and parking without banging the OTA into the legs: I did the initial alignment move ("go to Arcturus") and the ending move ("Go to Park position") without mounting the telescope!

The sky was mag 3-plus, with the two brighter mag-4 stars in the handle of Ursa Minor just barely visible. There was some haze. Seeing was fair to good: at high magnifications there were flashes of a diffraction arcs. I didn't do a star test, but I did note that the out-offocus images of stars showed nice circular rings.

Uranus was a lemony-colored disc at 100X; at 160X the edges weren't as sharp; Neptune was a dull dark blue dot, barely non-stellar in shape but non-stellar in color. Izar (ɛ Bootes) split very nicely at 100X and up. M51 was barely visible; the two cores were dim. Almach (γ Andromedae) was beautiful-it's a blue/yellow color-contrast double, like Albireo. M13 and M15 didn't resolve stars but M13 had a grainy texture. M11 was faint but resolved. NGC 457 (the "ET cluster" in Cassiopeia) was a bit hit with the students. M31 only showed the core but was a galaxy, so they liked it. M57 was a tiny ring; M27 showed up really well but was really too close to zenith to be safe and there was a bump incident which required re-aligning the IOptron. I finished up with NGC 7662 (the "Blue Snowball") which was definitely blue and visibly a disc. I pointed out how much it looked like Uranus in that respect (not a stellar color and a small disc) and how that explained the name "planetary nebula".

Astro 101: Navigating the Night Sky, YFOS, 14 September 2012

We had a full crowd (12 or so) at YFOS for my presentation. Alas, the skies were cloudy, so we didn't get to do any practical application of the material.

衆 Paul Winalski

Owls Landing Campground Sky Watch, Holderness NH, 15 September 2012

The star of the show was **Joe Derek** with his 17-1/2" reflector. I was there, as was a new member whose name I didn't catch.

This is an excellent site! The skies at Squam Lake are very dark (better than YFOS). The field is easily accessible to vehicles bearing cumbersome telescopic gear, and

September 2012

has very good horizon visibility. There are some building floodlights that the organizers tell me can be shut off next time.

We had 20+ campsite people turn up for the indoor presentation and the magnificent sky watch that followed. I usually feel frustrated because I know that the wonders of the sky that I'm showing off could be even better if the skies were darker and/or more steady. That wasn't a problem this night!

The skies were clear, dry, and steady. And dark. The Perseus Double Cluster was blatantly visible naked eye. I actually had trouble finding 61 Cygni because of the clutter of dimly visible naked-eye stars in the vicinity.

This was glorious observing. The objects I showed off were: Mizar, M22, M11, a couple of J-random open clusters in Sagittarius, M11, M13, M57, M27, NGC 457, NGC 7662 (the Blue Snowball nebula, which was showing internal structure), M17 (magnificent in a O-III filter), M31/M32/M110, 61 Cygni, T Lyrae, V Aquilae, S Scuti, and last and most magnificent, WZ Cassiopeiae.

The organizers were very pleased. I hope they invite us back. This is a magnificent site.

✤ Paul Winalski

Third Annual Saint Gaudens Star Party, 15 September 2012

I took my OA-9.0 in the Teeter truss-tube structure to the Third Annual Star Party at Saint-Gaudens National Historic Site event.

The site is the home of the sculptor August Saint-Gaudens. There are copies of several of his major works, such as the Robert Shaw Memorial (original in Boston) and the Admiral Farragut Monument (original in New York City). I toured the site in the early afternoon as a regular tourist and found that I admired his works.

The home is on a hill above the Connecticut River and there's a huge sloping lawn with a good view to all sides but the east. In the

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evening I set up there with some members of the Springfield Telescope Makers (who were friendly and welcoming; many of them had self-made telescopes, so they live up to their name!). Dan McShane, the man behind DGM Optics and thus the reason I have the OA-9.0 in the first place, lives near the Saint-Gaudens house and he met me there with his OA-4.0.

The sky was just barely mag 5; much of the Milky Way was visible and brighter deep-sky objects like M27 stood out. Dimmer ones like M51 were less visible; only the cores were clearly visible and I couldn't see spiral arms in the dim halos. The sky was clear until 10:00 PM when some thin clouds showed up, but we had to leave then anyway! Seeing was good but not great (no diffraction ring or arcs of the diffraction ring).

Dan really liked the Teeter structure and agreed with me that it has superbly smooth and easy motions. He spent a lot of time with my 'scope rather than his.

I showed the Veil Nebula (both sides; it was clearly visible in an NBP filter (also from DGM Optics!). The members of the public needed to be told that what they were looking at was the "smiley" arc across the whole field of view, as they apparently expected to see a small thing! I showed the North American Nebula with that filter but it was less successful with the public because it was upside down and so didn't look like North America to them. M51 wasn't fun for them either but M13, M3 and M31 were crowd-pleasers.

After the public left, Dan and I looked at some doubles; the 'scope split the close pairs in iota Cas and the Double-Double easily. I tried to find the Saturn Nebula (NGC 7009) but didn't succeed. I tried to use the Sky Commander but the encoders weren't registering clicks (I don't know why).

✤ John Bishop

Fall Messier Marathon, Lynedborough NH, 15 September 2012

The Fall Messier Marathon took place at the Wickett's residence in Lyndeborough, NH. I think **Ken Charles** and then Linda were the last to leave. I'm thinking it was 3 AM or so.

The only Messier object counts I have are:

Ed 32

Rich 42

The following attended and what they brought.

Sue, Ben and Scott Wickett,

John T Rose, pink lemonade.

Rich DeMidio, beef jerky

David Gilmore, Nori treats

Herb Bubert brought shrimp and some remote control airplanes.

Ed Ting

Stu May, desert

Pat Adams, nachoes.

Larry, Linda beef stew.

✤ Larry Lopez

I was able to get forty-two objects leaving around 1:30 AM when clouds started to interfere with viewing. I had thought the Sag region would be available for several hours so I decided to wait for objects to move from behind the trees while focusing on more accessible objects from other parts of the sky. Unfortunately, I miscalculated so I missed out on probably a dozen other objects that I would have easily found \circledast .

The seeing was tough for galaxies. Several in Ursa Major were a difficult challenge but I did manage to finally snag them. Since this was the fall, I also had the opportunity to see M30, M72, and M73 which are typically washed out in the early morning hours of the Spring Marathon. M30 was easily found while M72 proved challenging due to its low surface brightness. M73 was very difficult and was nothing more than an Asterism of stars in the same FOV as M72. I had to consult my notes on this one to verify. Ed's list was well thought out and easy to follow.

All in all, another great event. My thanks to the Wickett family for once again hosting a great event. I appreciated you opening your home for a night of escaping the real world by appreciating the heavens.

ℜ Rich DeMidio

I got thirty-two objects. But I was only observing for one hour. I left at 9 PM to get some much needed sleep.

✤ Ed Ting

NHAS August 2012 Business Meeting

The August business meeting was held at the McAuliffe-Shepard Discovery Center on 17 August 2012, our President, **John Bishop**, presiding.

President's Report

The rover Curiosity successfully landed on the planet Mars!

Fall is our busy season, with a lot of sky watches for schools, so this is a good time to volunteer.

Planning for a Fall Messier Marathon is in progress.

It is not too early to think about 2013 officer nominations.

The September NHAS Business Meeting is cancelled due to the schedule conflict with the New England Fall Astronomy Forum (NEFAF)which takes place on September 21-22. Many NHAS members have promised to assist. The officers have decided that supporting NEFAF is a higher priority than our business meeting. We may hold a minimal meeting at NEFAF.

Board of Directors

No report.

Educational Outreach

Rich Schueller gave the report.

Rey Center update: We are in good shape regarding volunteers for our sky watches for the Rey Center.

NHAS on Facebook: We are investigating connecting up our calendar to a NHASA Facebook page. The Library Telescope Program already has a Facebook page.

More members participating in the EOC would be helpful and welcome.

Library Telescope Program update: We have cleaned up more of the LTP online roster. We have confirmed lists of delivered scopes and libraries waiting for scopes. Steve Rand has been assigned as co-director of the LTP. He will be developing instructional videos for LTP scope maintenance (battery replacement, finder alignment, collimation). Steve will also be evaluating a zoned support structure for the LTP, where a single foster parent will be responsible for several scopes in an area. He will be working to define the zones, identify foster parent locations, and will poll the foster parents concerning area coverage.

There was discussion of ways for libraries to call us for service. Regular email and an online form were discussed.

Cornerstones of Science in Maine are an Orion dealer—we get our LTP scopes from them wholesale. Their goal is to expand the program to all of New England.

Public Observing

Paul Winalski reported that we are oversubscribed for the last couple of weeks of August. We have reached, if not exceeded, the limit of what we can support. To address this issue the Public Observing Committee has established a policy of scheduling no more than two events in any particular week. As not every event takes place due to

the weather, we are hopeful that this will address the burnout problem. It does mean we will have to say "no" to some events.

Membership

John Bishop delivered **Bill Steele's** report. Bill requests volunteers either to propose or to give Astro 101/201 workshops for the members.

Miscellaneous Business

We need guest speakers for all of 2013—please help out the next

President! We also need a Scope/Book of the Month for every month in 2013.

Books of the Month

Ken Charles presented H. A Rey's <u>The Stars—A New Way To See</u> Them. Rey drew new, more pictorial lines for the constellation patterns.

Melinda Byrne presented <u>Smith's</u> <u>Illustrated</u> Astronomy, by Asa Smith, principal of Public School 12 in New York City. This is how kids learned Astronomy in the 19th Century.

Educational Outreach Committee

Rich Schueller reported that there was an EOC meeting last Thursday, which unfortunately he couldn't attend. **Matt Amar** is looking for a primary person for the July Rey Center event.

The Library Telescope Program has placed scopes for all library requests submitted through the end of last year.

The EOC is working on planning for the 2012 New England Fall Astronomy Forum (NEFAF).

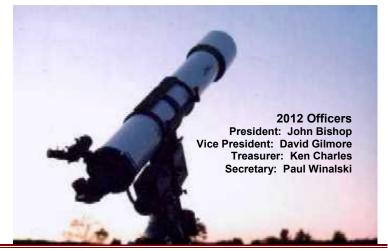
Evening Presentation

Elizabeth Newton, an Astronomy Ph.D. student at Harvard, presented "Distant galaxies and dark matter: using gravitational lensing to learn about the Universe". She discussed gravitational lensing and how the technique is currently being applied to the study of distant galaxies and of dark matter.

The Bottom Line

| Starting Balance: | \$9667.50 | | |
|---------------------------------|-----------|--|--|
| Deposits/Credits: | | | |
| Membership: | 180.00 | | |
| Donations: | 236.00 | | |
| Bank interest: | 0.44 | | |
| Total : | 416.44 | | |
| Accounts/Paid: | | | |
| Rackspace Cloud: | 21.88 | | |
| Telrad base for YFOS | 8.00 | | |
| Telrad | 36.00 | | |
| Dovetail for Meade loaner scope | | | |
| | 91.00 | | |
| Total: | 156.88 | | |
| Net Account Balance: | \$9927.06 | | |
| Petty cash drawer: | \$100.00 | | |

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|---|--|-------------------|---|
| Cash Balance: | \$10027.06 | | |
| EOC Share: | 5247.57 | | |
| Membership: 1 | 44 | | |
| New Members: Donald McDaniels, ME Matthew Krug, Con John Kubiczki, Ban Gary Duranko, Sale Denise Weber, Gran Patrick Quinn, Milf | way NH ington NH m NH tham NH | | |
| Donations: Friends of Griffin Lil Portsmouth Sidewalk | • | | |
| | ✤ Ken Charles Treasurer 2012 | | |



DEADLINE October 2012 Issue: 5 PM October 13

E-mail articles to the Editor. CHANGE OF ADDRESS – Notify the Treasurer of changes to postal or e-mail address.

How to Join N.H.A.S. Write to us: NHAS P.O. Box 5823 Manchester, NH 03108-5823 Attn: Treasurer

Send E-mail to: info@nhastro.com

Use our web site: http://www.nhastro.com/

This month's contributors:

John Bishop, John Rose, Joel Harris, Ted Blank, Larry Lopez, Rich DeMidio, Ed Ting, Ken Charles

New Hampshire Astronomical Society P.O. Box 5823 Manchester, NH 03108-5823

NHAS Upcoming Events

| Event | Date | Time | Location |
|--|--------------|----------|--|
| Fall Messier Marathon | September 14 | 5:00 PM | Wickett Residence, Lyndeborough NH |
| Astro 101: Navigating the Night Sky | September 14 | 7:30 PM | YFOS |
| Owls Landing Campground Sky Watch | September 15 | 7:30 PM | Owls Landing Campground, Holderness NH |
| Rey Center Sky Watch | September 15 | 8:00 PM | Curious George Cottage, Waterville Valley NH |
| Goffstown High School Sky Watch | September 18 | 7:30 PM | Goffstown High School, Goffstown NH |
| NEFAF 2012 Friday Sky Watch | September 21 | 6:00 PM | UNH Observatory, Dover NH |
| NEFAF Indoor Events & Solar Observing | September 22 | 10:00 AM | UNH Observatory, Dover NH |
| NEFAF 2012 Saturday Sky Watch | September 22 | dusk | UNH Observatory, Dover NH |
| Sidewalk Astronomy | September 22 | 6:00 PM | Market Square, Portsmouth NH |
| Discovery Center Sky Watch | October 5 | 7:00 PM | McAuliffe-Shepard Discovery Center, Concord NH |
| Goffstown High School Sky Watch | October 8 | 7:00 PM | Goffstown High School, Goffstown NH |
| Educational Outreach Committee Meeting | October 11 | 7:00 PM | Manchester City Library, Manchester NH |