Observer Staff Editor & Publisher: Paul Winalski



Newsletter of the New Hampshire Astronomical Society

Vol. 2010 No. 10

"All the news that fits in print"



Fall Public Sky Watches

President's Message

Passion. It's a word that many of us can resonate to. We all possess and apply it in our daily lives. Many of us apply it in the context of this club. Whether it is for Public Outreach, Astrophotography, Reading books, or Visual Observation. Some of us even have it in order to serve. I say this because we begin the process of electing officers for 2011. When I first joined NHAS, I can remember multiple nominations for several positions and even debates amongst the candidates done at business meetings. These people were passionate about their beliefs and wanted to serve and to make a difference. It seems that lately, we have to beg for people to run for office and I have often wondered why. Is there no passion in serving? We begin nominations at the October business meeting and will continue up to the actual vote during the December meeting. Nothing would make be happier to schedule time at the November and/or December meetings for the candidates to talk about their desire to serve.

I wanted to remind everyone that October is membership renewal month. In January 2011, we will implementing the new email distribution list policy so it is imperative that members have their dues paid up before then.

We are also less than a month from our fall messier marathon. I would like to extend my thanks to **The Wickets (Scott, Sue**, and **Ben)** for hosting this wonderful event. **Larry Lopez** is our organizer and he has posted information within the forums. It turns out that this event also occurs on the same day as the first Friday of the month sky watch at the McAuliffe-Shepard Discovery Center, (MSDC) so I will make sure we have coverage.

Finally, NHAS has received some wonderful recognition recently in the press due to the hard working efforts of the Educational Outreach Committee (EOC). It a true team contribution and I am eternally grateful for those people who are fantastic ambassadors for our organization.

Clear Skies,

★ Rich DeMidio NHAS President 2010

Highlights for This Month

Fall and Spring tend to be the prime seasons for public sky watch activities, and this Fall has been no exception. We have had major observing events in Pelham, Newington, and Nashua, NH. The Nashua North High School event in particular had encouragingly large public participation.

The floor is still open at the November and December business meetings for nominations for all the officer positions and the three-year term as Director. If you wish to serve, please place your name in nomination (note that you can nominate yourself—although someone else has to second the nomination). Don't be shy.

> ★ Paul Winalski NHAS Secretary 2010

YFOS Observing Report, 11 September

Before I left for YFOS I stopped to observe Venus naked eye in full daylight. The planet was easily visible a few degrees due West of the 2-day waxing crescent Moon. My thanks to **Matt Amar** for tipping me off on this observing opportunity.

Arriving at YFOS, I gave new member **Stijn Brand** his YFOS orientation. Soon the field was pretty crowded with telescopes, at first observing a fine crescent Venus during twilight. At 7:46 PM we were treated to a rare observing experience: the ISS (mag -3) ascending from the North and passing by Iridium 35 as it flared at mag 0 right by Polaris. This was an excellent and very long ISS pass.

We were very worried about sky conditions, but the clouds soon cleared out very nicely and left us with a few hours of very dark observing, albeit the seeing was under par and dew was a problem. I spent a good bit of time looking at Sagittarius eye candy (M8, M24, M22, M17, M20, M18), as well as the nearby M11 and fine carbon star S Scuti.

I stumbled upon σ Scorpii, which I hadn't realized is a pretty wide and easy double star. The evening's other double stars for me were WZ Cassiopeiae, γ Delphini, ε Bootis (only barely split), ζ Ursae Majoris (Mizar), and α Ursae Minoris (Polaris).

The Blue Snowball planetary nebula was showing very well. In the same vicinity, M31, M32, and M110 were

all in the same field of view using the 31mm Nagler in Mr. T. the 14inch TScope, and M31 was showing some dust lanes. Also in the galaxy department, M81 and M82 offered fine viewing.

The Perseus Double Cluster was a delight with the 31mm Nagler.

I was able to follow the Veil Nebula all the way around using a O-III filter, with fine, sharp detail.

As for carbon stars, T Lyrae is near minimum and now a pretty difficult object. V Aquilae is showing particularly red right now. 19 Piscium (aka TX Piscium) is bright and copper-colored.

Unfortunately the clouds came back in as the evening progressed and we all packed it in before midnight. But it was a fine observing session while it lasted.

★ Paul Winalski

I have been to YFOS three times within the last ten days and it has been absolutely wonderful. I wanted to share some key points for everyone to take advantage of.

Much to my surprise, the Sagittarius region of the sky is still visible for several hours after dark. It is a wonderful opportunity to view some great deep sky objects that once would not normally have a chance to. The Lagoon, Trifid, Swan (also called Omega), Eagle, and M22 just to name a few. I think M22 was just as good as M13, btw. The point is that you can lose yourself for hours in this area. I would estimate that it still should be good for the next two to three weeks. You can even walk up the milky way to M11 in Aquila.

The helix is visible this time of the year—the closest planetary nebula (I believe this is correct). It is positioned will in the sky. Very large but low contrast in my scope. Several globs in that area including M15 and M2 also make for some nice viewing.

The Summer Triangle is in perfect position. I was able to see the central star in M57 with averted vision. No, not averted imagination herb :) M13 and M92 are also visible and resolve well in any scope. If you look for M13, challenge yourself for NGC 6207 which is an 11 mag galaxy about 1/2 degree from M13. It is typically overlooked. M27 (dumbbell) and M71 which is a some globular in Sagitta creates a nice challenge for smaller aperture.

Moving to the east, Northeast, the double cluster and several objects in Cassiopeia are visible. Jupiter is also at a good height and is so bright that it could cause light pollution and certainly ruin your dark eye adaptation (especially if you look through an 18 inch scope with an 8mm Ethos)

★ Rich DeMidio

YFOS Status

The small heater has a full tank of propane, and one almost empty tank connected. The main heater has a full fuel tank, but do not light it—the startup procedure is in progress.

★ Larry Lopez

Amateur Telescope Making

Field trip to John Bishop's establishment to diagnose drive failure on his DOB mount. Voltage checks showed that batteries were not dropping rapidly and it was eventually concluded that they might need replacing.

These were classic 12 ampere hour Gel Cell batteries.

Keep your batteries charged. Use a good 3 stage charger.

★ Larry Lopez

Fall Messier Marathon

How many of the 110 Messier objects can you find in a single evening? Come to the home of **Scott**, **Sue**, and **Ben Wicket** to find out. Or just come for the pot-luck supper and socializing. Clear skies permitting, the all-night event will take place on Friday, 5 November. Otherwise it will take place, regardless of sky conditions, on 6 November.

★ Paul Winalski

The Ann M. White Telescope

NHAS has received a library telescope from Anne Friscia, the Merchandising Manager at Orion Telescopes and Binoculars. This telescope is now available for loan at the Conway Public Library.



The Ann M. White Telescope



The Dedication plaque It comes with this dedication:

"I would like to honor my friend's mother, Ann M. White, on this donated telescope. She is a retired library assistant from Larkspur, California and spent her working career in libraries. Her adult children have a great love and appreciation of the outdoors and an interest in astronomy, so this feels just right. Can you take a photo of the telescope with the plaque on it and send it to me so I can forward it to her once you have it? That would be appreciated."

We are proud and honored to accept this donation.

★ Paul Winalski

Pack 610 Sky Watch, Pelham NH, 24 September

The Pelham Cub Scout sky watch was held on Friday evening, Sept. 24th at the Raymond Park in Pelham. After a short pack meeting, Ted Blank presented a version of

"Tonight's Sky" tailored for the Cubs to get the information they needed to qualify for their Astronomy Belt Loop. At about 7:45 everyone headed over to the Raymond Practice Fields next to the park. NHAS members (counting clockwise) Ken Charles, Herb Bubert, Gardner Gerry, Nathan Carle, Bill Steele, Joe Derek, Ed Ting, and Rich Schueller were all set up and ready to go with scopes of all sizes, but shortly after everyone got some good views of Jupiter a bank of clouds rolled in and obscured even the full moon from sight. There were about thirty scouts and almost as many parents. Eventually some the kids went to the other side of the field and had fun running around in the moonlight while we waited for the clouds to clear. Several of the scouts were knowledgeable in Astronomy and hung around with us, and one told us exactly where we would find Altair when the clouds parted, and darned if he wasn't exactly spot on. Later in the evening, as some breaks appeared in the clouds, Ken managed to find some double stars and Joe showed a few people M57. As is usually the case, around 10pm after almost all the scouts and parents had left, the sky cleared. Still it was a very enjoyable night.

★ Ted Blank

Langdon Library Sky Watch, Newington NH, 9 October

Tom Cocchiaro organized this event for us, and **Ted Blank** gave a wonderful indoor presentation.

Langdon Library in Newington is one of our library telescope sites, and Scott, one of the librarians, said that he was organizing these sky watches to drum up local interest in astronomy and the library scope.

A few people stopped by for Halpha solar observing through my Coronado PST and a couple of 60mm Lunt scopes.

NHAS members present: Ted Blank, Tom Cocchiaro, Brian Cossette, Joyce and Brian Icaza,

Don McDaniels, Virgil Mehalek, Tim Mauro, Paul Winalski.

There were about a dozen people, parents and children, for Ted's wonderful indoor presentation. As one who's presented a lot of the "what's in the sky"–type talks before a sky watch, I'm envious of Ted's audience rapport.

Langdon Library has an excellent observing field (town athletic fields, actually) within walking distance of the library, and, with the gate arranged to be opened, accessible to the motor vehicles of the presenting astronomers. The field is surrounded by pine trees that almost totally block out the local street traffic and street lights. It ain't YFOS, but it's impressively dark for a suburban town observing site.

Somewhere around 20 very enthusiastic people in all showed up for the evening sky watch. Scott and the library staff graciously provided pizza for us all.

A few of us at sunset sneaked through the bushes and barbed wire fence onto the old Pease airbase to observe an exquisite two-day crescent Moon and thin crescent Venus nearby.

In the early evening I located comet 103P/Hartley in Mr. T. It was very dim. We got a better view of it later in the evening, but Comet Holmes this is not. It's a dim object under the best of circumstances.

Among the objects I showed off in the 14" TScope were: double stars Alberio, Mizar, Eta Persei, Gamma Arietis, Epsilon Lyrae; globular clusters M13, M92, M15; galaxies M31, M32, M81, M82; open clusters M11, M8, NGC 457, Pleiades; emission nebulae M17, M8; planetary nebulae M52, NGC 7662; carbon stars T Lyrae and V Aquilae; supernova remnant the Veil Nebula. And of course Jupiter, which was showing only three moons early in the evening. The fourth moon made its appearance mid-evening.

★ Paul Winalski

During the Langdon Library skywatch presentation, I had a wonderful experience. There were six children (four girls and two boys) in the front row. In my presentations I always try to show a painting of the Milky Way, and then show the Hubble Deep Field image near the beginning. My technique is to show a picture of the Hubble (HST), then put up a black slide while I talk about the multi-day exposure required to expose what was in a patch of the sky about the size of a red dot from a laser pointer. This lets the audience's eyes adjust to the dark. I also mention that until HST, this (black screen) was all we saw when we looked at this spot in the sky. Then, I fade in the Hubble Deep Field image into the really dark room. I'm sure everyone in the club can imagine the impact that has on the audience.

In this case, a girl of about nine was sitting right in front of me. When I put up the slide and she saw that image, I watched her jaw drop open. As I explained what some of the objects in the image were, I kept glancing down at her, and her jaw never closed and her eyes never left the screen. For almost a full minute she appeared completely lost in that beautiful image. I can't think how any presenter could wish for a better reaction than that. I hope her jaw did not hurt all night.

So, my tip would be: if you are going to use the Hubble Deep Field in a slide show, I highly recommend putting a black slide in front of it while you explain how the image was obtained. I think having their eyes a bit dark-adapted really does help people appreciate the delicate beauty in that image.

★ Ted Blank

Nashua High School North Sky Watch, 12 October

It was a really fine night. NHAS members who I know were there: John Bishop, Ken Charles, Gardner Gerry, Ed Los, Rich Schueller, Ed Ting, Paul Winalski. And there were others--I lost track because I was so busy at my scope. The weather cooperated wonderfully. The noon update to the CSC said we'd get a blanket of clouds from 6-8 PM. As it turned out the cloud bank went through at 5-7 PM. We were left with a fine view of the crescent Moon early on, and then the clouds cleared completely and we had as good skies as Nashua, with its urban light pollution, can offer.

Attendance was estimated (by me and Ed Ting) at 200-300. Maybe more. All for the most part well behaved. I thought I was going to be observing Jupiter all evening because it took an hour or more to clear the long line for the view of the King of the Planets in Mr. T. I did get to show very fine views of other objects later on, though: M13, M11, NGC 457, the Perseus Double Cluster (I looked for, but could not find, comet 103P/Hartley), Mizar, 61 Cygni. Later in the evening, when the big crowd had thinned out, I treated the die-hards to M15, M57, M31/32/110, M81/M82, V Aquilae, T Lyrae, WZ Cassiopeiae, and Gamma Arieatis.

I was interviewed by a reporter from the Nashua Telegraph who was covering the event. I emphasized the public outreach mission of NHAS, of which this event was one part, and our delight that we could show off the night sky to so many people.

Several teachers from the general area who were in line for the view from Mr. T. asked about us and our educational outreach programs. I answered as best I could.

I also met the teacher from Nashua High School South (can't recall his name) who is in charge of the planetarium there. He said he was in touch with **Matt Amar**. He's discussing with his principal the prospects of working closely with NHAS to hold sky watches in conjunction with use of the planetarium. I said we'd be delighted to cooperate, and that I would like to be personally involved in the proceedings.

Everyone seemed to be very pleased with how this sky watch event went. I suggested to the organizers that they might want to hold another sky watch in April or May, when a very different part of the sky will be visible. Don't be at all surprised if this becomes one of the annual fixtures on our sky watch calendar.

★ Paul Winalski

I set down my telescope, intending to back to the car to get my good eyepieces and my warm clothing. I never made it. I got mobbed immediately and the next thing I knew it was 2 hours later and I was freezing cold.

★ Ed Ting

Private Star Party, Bedford NH, 17 October

A year ago when I started to donate these private "star parties" as silent auction prizes to various charities and groups that Tina and I like to support, I had no idea how it would go. As it turned out, each of the high-bidders so far has chosen to have a dinner party for some of their friends and make this the "special event" of the evening. That was the case on 17 October as well.

I presented the indoor talk to the fourteen guests from 6:30 to 7:15. Then I headed over to Benedictine Park, about a mile from the house. Besides me, Herb Bubert, Ed Ting, John Russell, and Peter Kelley were the "NHAS Irregulars". In fact, they were showing objects to a Bedford police officer when I arrived (bearing the permit to observe in the park after dark.) I don't think our members were in any danger of being arrested though, as the officer was staring at Jupiter in Ed's 12" reflector. The family came over with their friends shortly thereafter, bringing a very nice pumpkin cake for the astronomers. The list of objects included the Owl Nebula, star clusters, M57, Jupiter, Luna, and many others. I heard people mentioning the double-double, too. Weather was fine, not too cold, and perfectly clear. They staved about twp hours, and we all left about 10 PM.

★ Ted Blank

NHAS September 2010 Business Meeting

The September business meeting was held at St. Anselm College on 17 September, our President, **Rich DeMidio**, presiding.

President's Report

Membership renewals are due in October. The Officers and Directors have agreed to a new policy regarding the club-wide email distribution list. Going forward, the list will be restricted to members in good standing (*i.e.*, dues paid up). Delinquent and lapsed members will be purged from the list each January. Those in danger of being dropped in January 2011 are being notified now.

We have decided that NHAS as an organization will offer to its members optional membership in the Astronomical League. The fee (an optional \$7.50 per member plus \$10 to the club) will be collected before April. Renewals occur in April. **Ken Charles** will send an update on this to the membership.

The Q4 Officer's Meeting will occur in late October.

Prime observing season has started—this is the time to get to YFOS!

Board of Directors

No update since last month's report.

Educational Outreach

Rich Schueller reported that International Observe the Moon Night will be celebrated on Saturday September 18 at MSDC, with NHAS requested to assist. This is posted on our calendar and in the website forums.

The last EOC meeting discussed AeroSpaceFest 2010: what went right; what went wrong; accomplishments). We will be meeting with MSDC staff in November. It is possible that we may have a second Astronomy Day celebration during the fall (perhaps at Phillips-Exeter Academy).

Updates have been made to the Library Telescope Program based on lessons learned. We have been in contact with *Sky & Telescope* to

October 2010

participate in the magazine's Focal Point forum (a 550 word article with pictures). This is ready to go. **Marc Stowbridge** wrote the article, with editorial input from **Tom Cocchiaro**, Rich Schueller, and others). How-to info on setting up a library scope will be updated to our website.

Ted Blank has won the first Sidewalk Recognition Award nationally for reaching fifty hours of sidewalk observing.

The Library Telescope Program is about to grow well beyond New Hampshire. We have had contact through co-workers with the Maine Cornerstones of Science. Schools, libraries, and affiliates nationwide are eager to learn "how it is done". We are in touch with Orion Telescopes concerning a feature in their Christmas Catalog. Discussions are also in progress concerning articles with *Sky & Telescope* and *Astronomy* magazines.

Website

Matt Marulla reports that the new NHAS website and forums are up and running. Matt is working with the Board of Directors on asset maintenance website features.

Membership

Bill Steele requests Astro 101/201 potential presenters to contact him if they wish to give a talk on a topic. The Membership Committee is looking for local libraries to host Astro 101/201 classes.

New members present: **Dick** and **Nancy Berg** (Wolfeboro) moved up from the capital area and have joined. We also welcome **Dale Moore** from Peterboro. Steve Bryan from Bedford, a prospective member, was also at this meeting.

YFOS

Larry Lopez reports that he, Chase McNiss, Joe Derek, and Mike Townsend were at the YFOS 2010 work party held a few weeks ago.

Astrophotography

Be sure to check out the forums for the new images. **Gardner Gerry** will make a presentation at MSDC before our first Friday event.

The NHAS Observer

New Hampshire Tech Fest

This will take place on 23 October at Windham High School. **Ken Charles** is our point of contact. Ken will email the NHAS list. On a side note, 2011 Astronomy calendars will be available for purchase at the October business meeting.

Miscellaneous Business

Our current guest speaker lineup:

- October: John Blackwell presenting "Adventures in Spectroscopy"
- November: open
- December: NHAS Open House

NHAS Awards will be presented at the December business meeting. Send nominations to Rich DeMidio.

It's election time. Due to term limits, our current president (Rich DeMidio) and vice president (Mike Townsend) are not eligible to continue in their current roles (but they can serve in other offices, if nominated and elected). From the October to December business meetings, the floor will be open for nominations for candidates for all four club officers (President, Vice President, Secretary, Treasurer) for a one-year term, plus a three-year position on the Board of Directors.

In lieu of a guest speaker at our December business meeting, we will have a NHAS social event in the function room at MSDC. This will be a pot luck meal—think about what you might bring. There will be tales for equipment, books, and whatnot. This will be a chance to chat with other members concerning your favorite topics. It should be a nice way to end a successful year!

In the Sky

NASA has published a fine Hubble image of the η Carinae Nebula.

Jupiter is bright right now in the evening sky.

An image of the Veil Nebula by **Herb Bubert** was presented.

Comet Hartley 2 is next to the Double Cluster in Perseus on 2 October.

Book of the Month

Rich DeMidio presented <u>The</u> <u>Messier Objects</u> laminated flip charts.

Scope of the Month

Gardner Gerry presented his Takahashi FSQ-106 refractor. This is his primary imaging scope: a f/5 quadruplet with two fluorite elements. It is a flat field astrograph with a 4" focuser because of the large image size.

Evening Presentation

Several club members presented advice on successfully running the Fall Messier Marathon.

The Bottom Line

| Starting Balance: | \$6830.36 |
|--------------------------|-----------|
| Deposits/Credits: | |
| Membership: | 315.00 |
| Donations: | 146.70 |
| Bank interest: | 1.61 |
| Total : | 463.31 |
| Accounts/Paid: | |
| NH Tech Fest Donation | 30.00 |
| Total: | 30.00 |
| Net Account Balance: | \$7263.67 |
| Petty cash drawer: | \$100.00 |
| Cash Balance: | \$7363.67 |
| Membership: 147 | |

Donations:

| Dave Weaver (for EOC) | 96.70 |
|-----------------------|-------|
| Tim Sagear | 50.00 |

New Members:

Mary Rossiter, Somersworth, NH Ken Charles NHAS Treasurer 2010



DEADLINE November 2010 Issue: 5 PM November 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:

Rich DeMidio, Larry Lopez, Ted Blank, Ed Ting, Ken Charles

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

NHAS Upcoming Events

| Event | Date | Time | Location |
|--|-------------|---------|---|
| Maple Wood School Sky Watch | October 18 | 7:00 PM | 184 Maple St. Extension, Somersworth NH |
| Astri 101: Navigating the Night Sky | October 21 | 7:00 PM | Nashua Public Library, Nashua NH |
| Seabrook Library Sky Watch | October 22 | 6:30 PM | 157 Depot Road, Seabrook NH |
| New Hampshire TechFest 2010 | October 23 | 9:00 AM | Windham High School, Windham NH |
| Fall Messier Marathon | November 5 | 5:00 PM | Wicket residence, |
| Discovery Center Sky Watch | November 5 | 7:00 PM | McAuliffe-Shepard Discovery Center, Concord NH |
| Reeds Ferry School Sky Watch | November 9 | 7:00 PM | 15 Lyons Road, Merrimack NH |
| Educational Outreach Committee Meeting | November 11 | 6:30 PM | Ralph Pill Building, 22 Bridge Street, Concord NH |
| Coffee House Night | November 12 | 5:00 PM | YFOS |
| Astro 101: YFOS Orientation | November 13 | 4:00 PM | YFOS |
| NHAS Business Meeting | November 19 | 7:30 PM | St. Anselm College, Manchester NH |
| Discovery Center Sky Watch | December 3 | 7:00 PM | McAuliffe-Shepard Discovery Center, Concord NH |