



## New Website Debuts

### President's Message

In the June Newsletter, I talked about our first half status measured against the vision for this year. For the 2<sup>nd</sup> half of 2010, here is what we are looking at pertaining to club business.

**Financial Review**—The officers will conduct this annual review during the Q3 officer meeting. Results will be reported at the September club business meeting.

**Astronomy League Membership**—The officers will be looking to *optionally* have members subscribe to this organization. If implemented, this will be reflected as an additional cost added to the NHAS membership. Subscription will be **optional**.

**Web Site Tuning**—With the new rollout complete, there are additional tuning tasks that can now take place. You might see messages from the Webmaster pertaining to specific tasks and potential downtime.

**Online Asset Database**—With the board completing the inventory, we are now in a position to automate and improve efficiencies. This would include online bailment, which provides better audit controls. Discussions are already taking place.

**2010 Awards**—These will be given out at the December business meeting. It is **NOT** too early to start thinking about nominating a member whom you believe has added significant contribution to NHAS. Awards are given to people who have been nominated by the membership, not by the officers.

However, officers are members so they may place nominations as a member. Please submit nominations to me via email with a brief description of the contribution and value added to NHAS.

**2010 Elections**—The process starts in October when nominations can be submitted up until the election at the December meeting. Please start thinking about serving and nominating members for positions. There will be several important positions up for election this year. Clear skies,

★ Rich DeMidio  
NHAS President 2010

### Highlights for This Month

Our Webmaster and the Educational Outreach Committee have been hard at work for many months now revamping our website. The results of this long, hard effort are finally up and running.

This is the traditional quiet period for public observing, but one of our most traditional and important events of the year—the Goffstown Library Sky Watch—did take place, and this time we didn't feed as many mosquitoes as we usually do.

And if you've ever been approached by members of the public who are concerned about the alleged end of the world when the Mayan calendar completes its major cycle in 2012, read the report on **R. P. Hale's** lecture on the subject after the June Business Meeting.

I have included a write-up from **Marc Stowbridge** on the Library Telescope Program. The major problem, as pointed out by one of

the NHAS library scope custodians, is that the scopes are perpetually checked out, and so it's difficult for the custodian to get his hands on it to do maintenance!

★ Paul Winalski  
NHAS Secretary 2010

### Updated NHAS Website Goes Online

For nearly a year now, the NHAS Website Committee has been working on a new version of the NHAS website, to better serve both the public and our members. The new website recently replaced the old one at [www.nhastro.com](http://www.nhastro.com). Among the new features of the website are:

A more modern "skin" and look-and-feel. More convenient access to the important sub-pages. The main menu is now presented across the top of the site, as opposed to along the side. The main menu is optimized for use by non-members, with prominent display of "Skywatches" and "Contact Us" buttons.

The calendar is now being managed by Google Calendar as opposed to a home-grown facility. This provides several valuable features, including more convenient management of the calendar by the officers and committee chairs.

The mission statement on the main page has been updated.

The "Contact Us" facility now has a form that the public can fill out to request a sky watch or other information. On the back end of this interface, the appropriate members of the officer/committee

chair corps receive email notice when such requests come in. This is most important in handling sky watch requests.

Direct public access to the PowerPoint presentations for the Astro 101 courses is now available.

Going forward, the infrastructure is now in place for future website enhancements. An online list of NHAS assets is in the works.

Congratulations to the Website Committee, and our webmaster, **Matt Marulla**, for a job well done!

★ Paul Winalski

## Goffstown Library Sky Watch, Goffstown NH, 30 June

We have had a scheduled sky watch for the Goffstown Library for at least sixteen years running—it is our oldest public outreach event. Not all of them have taken place, due to adverse sky conditions, but this one did. This event is famous for the numbers and enthusiasm of the public who show up, and infamous for the numbers and ferocity of mosquitoes that show up.

Our hosts provided refreshment in the (astronomically appropriate) form of Starburst candy and Moon Pies.

The skies were quite clear, but the tragedy of these summer sky watches is that it doesn't get decently dark until all or nearly all of the public have left the observing field. We need to think about a solution to this conundrum, but I'm not sure what it is.

During the earlier parts of the evening, I had the 14" Tscope focused on Saturn (several moons visible) and easy double stars such as Mizar and Albireo. Later on, M3 and M57. And NGC 457 and M11, when they were high enough and the skies dark enough.

We also had scopes, both Mr. T, the other big dobs, and the Schmidt-Cass scopes, and some of the refractors, that offered views that were wheelchair-accessible. I was delighted that we had views of lots of objects for those in wheelchairs.

And M81 and M82, for some of the folks in Goffstown who coordinated this event for us, and who stayed late, after most of the public had left.

**Herb Bubert** had a religious moment when it got genuinely dark—alas, after all of the public had left. I borrowed **Ken Charles's** 13mm Ethos eyepiece to look at M13 in the TScope. The view was breathtakingly awesome! Herb had great difficulty tearing himself away from that view. I've managed to resist the temptation to buy a 13mm Ethos eyepiece. So far... although Herb has given in to temptation (after complaining that the Ethos had turned his Nagler into a Plossl, by comparison).

★ Paul Winalski

## McAuliffe-Shepard Discovery Center Sky Watch, Concord NH, 2 July

This, of course, is always an important event on our public observing calendar. And we managed to get decently clear skies. I'd say about thirty people looked through the scopes at early evening views of Venus and Saturn (several moons visible, including a rare view of Japetus).

There were also two passes of the International Space Station.

Given the prohibitive effects of the general light pollution from Concord, and the very late sunset, I mainly concentrated on double stars: Mizar, Polaris, Epsilon Lyrae, Albireo, 61 Cygni. And T Lyrae and V Aquilae as representative carbon stars.

As the sky got darker, we were able to show more deep-sky objects, such as the open cluster M11, M13, and the Ring Nebula in Lyra, M57. I also found M51 (the Whirlpool Galaxy in Canes Venatici), but given the Concord light pollution the view wasn't very good.

I helped a new club member (he'd joined after attending an earlier MSDC sky watch, and bought a scope on our recommendations) collimate his new 8" Meade truss-

tube dob. I gave him some pointers as to objects he should observe through his scope. He really ought to get a zero-mag bulls-eye spotter (e.g. Telrad or Rigel QuikFinder), and a shroud to help with light leakage. We were still able to find impressive views of a lot of objects in his scope.

It's important that we show up for these events even if the sky conditions are not ideal—folks show up with telescopes that they don't know how to use. They are looking to us for advice and direction on what, and where, to look in the sky.

Late in the evening, alas—after most of the public had left—the seeing got exceptionally good, and we were able to view the companion to Antares in several scopes. I was able to split Antares easily in the 14" TScope using a green filter, which succeeded in attenuating the light of the primary star while letting through most of the light from the secondary. With this aid the glare from Antares was dramatically reduced, and the blue-white companion star was clearly visible. This is only the second time I've ever seen the Antares companion. Other NHAS veterans were able to confirm the sighting in their scopes.

I'm always delighted to participate in a sky watch at the Discovery Center. The unexpected view of the Antares companion made it an especially memorable event.

★ Paul Winalski

## Solar Observing, Keyes Field, Milford NH, 4 July

Back in June Mike Townsend asked me if I could help him with his Solar Observing Demonstration at Keyes Field in Milford NH. The previous year had been very crowded and trying to monitor multiple telescopes was very difficult. So I agreed. While I did remember some of the basics, I did find on arrival that I had no sunscreen with me. But, the clouds moved in enough to greatly limit the viewing and protect me from a

nasty sunburn. Perhaps it was fortunate there was a small turnout at the field.

I think most of those that expressed an interest and were patient did get a chance to look at the sun in white light and H $\alpha$ . Hopefully I will remember some lessons learned for next year. Sunscreen, umbrella, very limited concession stand, and some club handouts for the visitors.

★ John Rose

### Astro 101: Beginning Astrophotography, YFOS, 19 June

Gardner Gerry and Herb Bubert presented this course on the basic concepts of astrophotography. Several prospective astro photo bugs (myself included) attended. The key part was the hands-on experience afterward, on the observing field. Clouds and haze prevented much deep-sky observing, but I, for one, was able to verify that all my equipment and software actually worked, several of us took our very first astro photos (mainly Moon images). These have been posted in the club forums.

Well done, Gardner and Herb! I look forward to the next session.

★ Paul Winalski

### Random Acts of Observing—17 and 18 June

At a family reunion I put up my Orion Short-tube 80 and showed people the Moon and Saturn from the parking lot outside the hotel on Thursday and Friday night.

The Moon was a big hit; Saturn was just a dot with a line through it but people did like seeing the ring even if it was just a line.

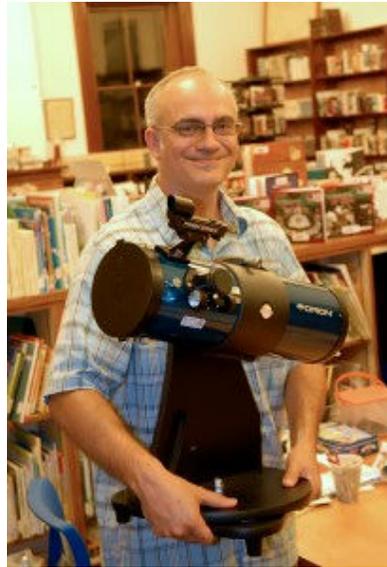
You don't need good conditions to please the public!

★ John Bishop

### Newington Library Scope Status

Trustees of the Langdon Library in Newington funded the telescope as well as literature to go with it—we

provided the shopping list and suggested support materials.



Scott Campbell, Head Librarian, with the Langdon Library Telescope (Tom Cocchiario photos)



A rare view of the Langdon Library scope in its display (the scope is usually checked out).



Kids with the media that accompany the scope in the Langdon Library.

I am the caretaker of this scope. I've also organized two sky watches there following installation of the scope—one was a daytime solar sky watch with the summer camp kids in Newington. The other was a presentation and solar and evening sky watches at the library. (See

reports on these sky watches in previous issues of the *Observer*).

★ Tom Cocchiario

### Ossipee Library Scope Status

Just wanted to say a huge thanks to **Marc Stowbridge** and others involved in the NHAS public scopes for public libraries campaign.

I stopped by the Ossipee Public Library today to see if I could take our scope home to check collimation, batteries, etc. Answer was, nope. It's hardly spent any time at all on the library shelf in the last two months (prominently displayed, when it is there, behind the checkout desk.)

In fact it's on reserve through the end of the month. Our librarian said everyone who's used it seemed very pleased.

So thanks again, Marc, from the Town of Ossipee.

★ Bob Gillette

### NHAS Library Telescope Project

Telescopes are, it seems, a New Hampshire tradition. In the poem "The Star Splitter", Robert Frost wrote the words he attributed to a "retired" farmer, Brad McLaughlin:

*"The best thing that we're put here for's to see;  
The strongest thing that's given us to see with's  
a telescope. Someone in every town  
seems to me owes it to the town to keep one.  
In Littleton it may as well be me."*

The New Hampshire Astronomical Society, and particularly its Educational Outreach Committee, has started placing telescopes and educational materials in selected libraries in NH. Our goal is to help foster scientific literacy and to stimulate the interest in astronomy.

We are particularly interested in having children use the telescope (with appropriate adult supervision). By placing the telescopes in local libraries instead of schools, they can be put into circulation just like a

book. Along with the equipment comes a local Club member who will periodically clean and adjust the telescope, and act as a local astronomical resource to the library patrons.

We have presented a few libraries with outright gifts, starting with libraries that have shown an interest by hosting sky watches. The majority of the libraries have opted to purchase their telescope with their own funds, accepting the Club's guidance and support. If there is not a member in the area, the library staff is instructed on the "care & feeding" of the equipment, an easy task given the particular telescope.

The Project continues to be very well received. Each participating library has a waiting list for their telescopes, and has tied book displays in with the project.

The first library to have received a telescope was the Cook Memorial Library in Tamworth, NH. I am sure they would be willing to share information about their experiences with the telescope project.

<http://tamworthlibrary.org/> (scroll down their web site a bit to see the article) As of June 1<sup>st</sup>, 2010, we have placed over twelve scopes!



**Orion StarBlast 4.5 Astro Telescope**

[http://www.telescope.com/control/product/~category\\_id=reflectors/~category=telescopes/~product\\_id=09814](http://www.telescope.com/control/product/~category_id=reflectors/~category=telescopes/~product_id=09814)

The Club suggests that the librarian or the teachers at the local schools identify a youngster, likely 6<sup>th</sup> or 7<sup>th</sup> grade, who would be interested in becoming an apprentice astronomer. This child would learn about

astronomy and, using a telescope; act as a liaison to the local schools. They could easily learn to care for and use the telescope. When this child left the school, they would be replaced with a like-minded student who would then carry on the tradition.

The NHAS has selected the Orion StarBlast 4.5 inch Astronomical Telescope for the libraries, along with eyepieces and supportive material.

We have rewritten the instruction manual and provide a laminated, spiral-bound 4 by 6 inch copy with each scope. The telescope is easy to use and robust. There is nothing to assemble. It has a wooden base, not the usual spindly tripod legs. The telescope is of manageable size, but has a relatively large optical tube. This means that the Moon and planets would show far more detail than one could see with the common "beginners" telescope. It also has a large field of view that allows the object to stay in the eyepiece longer. This is a quality instrument.

If you are interested in this program, please contact me directly, and I will be happy to answer your questions.

Thank you for supporting literacy, in all its forms.

★ Marc Stowbridge

## NHAS June 2010 Business Meeting

The June business meeting was held at the McAuliffe-Shepard Discovery Center on 18 June, our President, **Rich DeMidio**, presiding.

### President's Report

**Public Facing:** **Dave McDonald**, on behalf of the McAuliffe-Shepard Discovery Center, thanked NHAS for our participation in Aerospacefest 2010—all the scopes in a prime viewing position, our upstairs display, and the help in the observatory. He read a thank you letter to NHAS from MSDC (published elsewhere in this issue of the *Observer*).

Rich gave well-deserved kudos to **Ted Blank** for his superb job and "cat herding" skills in planning for the event. Dave, Rich, and Ted presented appreciation certificates to the NHAS members who participated in the event: **Matt Amar, Ted Blank, Herb Bubert, Jean Buckley, Ken Charles, Tom Cocchiario, Brian DeCaza, Joe Derek, Mike Frascinella, Gardner Gerry, David Gilmore, Walt Jablonski, Matt Marulla, Chase McNiss, Scott McCartney, Dave McDonald, Don McDaniels, Vince Quarterone, Rich Schueller, Marc Stowbridge, Mike Townsend, Wade Walker, Dave Weaver, and Paul Winalski.**

A major NHAS event at Portsmouth Market Square Day is planned for this month (see the full report in June's *Observer*).

We continue to have requests for both public and individual events.

**Internal:** The new website rollout is ready (see the report in this issue of the *Observer*).

**Joel Harris** will be our Stellafane coordinator. Plans are starting.

We are planning on an Astronomy League membership option for 2011.

### Board of Directors

No update since last month's report. The Board will be focusing on automating some asset tracking tasks now that the new website is completed.

### Educational Outreach

**Matt Amar** reporting: We had a major presence at Market Square Day 2010 in Portsmouth NH. Tom Cocchiario was the event organizer. Other NHAS members attending: Ted Blank, Ken Charles, David Gilmore, Don McDaniels, **Bill Steele**, and Paul Winalski. The weather did not cooperate, but once the rain stopped we were able to give close-up views of distant objects in the scopes. Lots of interest in the club and its activities was generated, and we connected with hundreds of people—as well as a lobster and a giant acorn. The public were very appreciative of

what we shared. This event was well worth it for NHAS.

The next EOC meeting will be Thursday, 15 July.

The president of the Nashua PTA has contacted NHAS concerning a planetarium in Nashua High School South, requesting our advice on how to best utilize it. Let Matt Amar know if you are interested in this. Dave McDonald has seen the planetarium—it seats about thirty people and is lit by a halogen lamp. Tom Cocchairo suggested that we do the “fair circuit” in the fall, in conjunction with the Discovery Center’s portable inflatable planetarium.

Rich DeMidio suggested that we do some of the town “home days” in addition our current presence at Madison.

### Website

The new website is ready for rollout. The Website committee is investigating policies and mechanisms for the use of Facebook as an internal communications tool. A separate report will follow. This is non-trivial because of issues regarding privacy and monitoring of postings.

The Website Committee is also working with the Board of Directors on automating asset management.

### YFOS

**Larry Lopez** reported that the porta-potty was pumped. Propane tank filling is scheduled, which will make the fall startup a lot easier. Bird’s nest infiltration in the southwest corner of the observatory building has been discovered and looked into. Herb Bubert has been mowing the site—thank you, Herb!

### Public Observing

Marc Stowbridge reported that the Goffstown sky watch is coming up at the end of the month. As usual, it will be held in the field across from the cemetery (same old field, new mosquitoes).

Reeds Ferry in Merrimack has signed up for the fall.

The New Durham Friends of the Library gave us \$50. Marc has

upgraded their library scope. They can’t keep it in the building—it is perpetually on loan.

### Astrophotography

An Astro 101 imaging class is scheduled at YFOS (see report in this issue of the *Observer*). Contact Gardner Gerry if you are interested in attending.

### Miscellaneous Business

Rich is working on lining up guest speakers for the second half of the year. He will be giving a report on his observing trip to Australia at the July business meeting. **John Blackwell** will be our October speaker, topic yet to be determined.

Ken Charles reported on NHAS attire. There are still two size XL NHAS jackets left from the initial purchase; contact Rich DeMidio if you are interested. There has been a recent price reduction, and pooling of orders helps reduce cost. Ken has some samples.

Joel Harris needs someone to bring the club tent to Stellafane. Members wishing to attend the event should register individually at stellafane.org.

### Evening Presentation

**R. P. Hale** gave an excellent and entertaining presentation on “The 2012 Fraud”. The fraud in question is the allegation by some New Age authors and dilettantes that there will be apocalyptic disaster at the end of a major cycle in the ancient Mayan calendar on 21 December 2012. The story has been picked up by major media, and by Hollywood.

R. P. has focused his prodigious scholarly talents on the field of Astronomical Archaeology in the Central American region. His conclusion is that, based on the factual evidence, the 2012 Mayan apocalypse prediction story is nothing but the purest drivel. The story is driven mainly by the greed of New Age book authors and other media types eager to extract profit from the non-issue.

I have been asked on several occasions by worried members of the public about it, and have only been able to express general

skepticism concerning the dire predictions. Now I—and you—have the facts to refute this load of complete twaddle:

### The Mayan calendar cycle doesn’t end in 2012.

R. P. presented the whole workings of the Mayan calendar cycle to us. It consists of nested cyclic periods of 13 and 20, mainly the latter. The calendar’s purpose is to describe and predict accurately the long-term apparent sky motions of the Sun, Moon, and Venus.

The significance of 2012 is entirely based on a misinterpretation. One of the cycles is depicted as 13 when it should be 20. It is a clear and blatant error—the primary sources themselves are very clear that that cycle should be 20. Properly interpreted, then, the major Mayan calendar cycle in question ends in 4772, not 2012.

### The Mayans do not consider the turnover of the cycle as earth-shatteringly significant.

It is to be merely the start of the next turn of the cycle, nothing more. One of the ancient Mayan kings predicted that he would return from the afterlife several years after the turn of the major cycle—why would he have predicted that, if the end of the cycle was supposed to be the end of the world?

My gratitude to R. P. for giving me the ammunition to refute this nonsense with solid facts.

★ Paul Winalski

### The Bottom Line

<b>Starting Balance:</b>	<b>\$7080.76</b>
<b>Deposits/Credits:</b>	
Membership:	90.00
Bank interest:	1.44
Total :	91.44
<b>Accounts/Paid:</b>	
United Site Services:	54.30
Total:	54.30
<b>Net Account Balance:</b>	<b>\$7117.90</b>
<b>Petty cash drawer:</b>	\$100.00
<b>Cash Balance:</b>	<b>\$7217.90</b>

**Membership:** 135

★ Ken Charles  
NHAS Treasurer 2010



**2010 Officers**  
 President: Rich DeMidio  
 Vice President: Mike Townsend  
 Treasurer: Ken Charles  
 Secretary: Paul Winalski

**DEADLINE August 2010 Issue: 5 PM August 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](mailto:info@nhastro.com)

**Use our web site:**

<http://www.nhastro.com/>

**This month's contributors:**

Rich DeMidio, John Rose, John Bishop, Tom Cocchiaro, Bob Gillette, Marc Stowbridge, Ken Charles

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



## NHAS Upcoming Events

Event	Date	Time	Location
Educational Outreach Committee Meeting	July 15	6:30 PM	22 Bridge Street, Concord NH
NHAS Business Meeting	July 23	7:30 PM	St. Anselm College, Manchester NH
Discovery Center Sky Watch	August 6	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Madison Old Home Week Sky Watch	August 11	8:00 PM	Burke Field, Madison NH
Nichols Memorial Library Sky Watch	August 12	8:00 PM	169 Main St, Kingston NH
NHAS Coffee House Night	August 13	5:00 PM	YFOS
NHAS Business Meeting	August 20	7:30 PM	McAuliffe-Shepard Discovery Center, Concord NH
Discovery Center Sky Watch	September 3	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
NHAS Coffee House Night	September 10	5:00 PM	YFOS
Nantucket Star Party (tentative)	September 11	7:00 PM	Nantucket Island, MA
NHAS Business Meeting	September 17	7:30 PM	St. Anselm College, Manchester NH
Discovery Center Sky Watch	October 1	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH