Observer Staff
Editor & Publisher:
Paul Winalski

The NHAS Observer

Newsletter of the New Hampshire Astronomical Society

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Stellafane

President's Message

Stellafane Report

Our annual trek to Stellafane was another success. We had two nights of observing but did lose the third night (Saturday) to rain. I arrived early Thursday afternoon and staked out our usual spot for the club, then claimed a campsite for myself in shady Pine Island. I then walked the campgrounds, reunited with a few Stellafane friends, then went and had dinner by myself in the food vendors' tent. There were few people there then, but one did come in and sit with me for a quick chat, none other than TeleVue owner Al Nagler. We chatted about refractors and eyepieces for a while (what else?). Later that evening I found myself observing quite by accident with Sue French who writes the monthly article Deep-Sky Wonders for Sky and Telescope. I enjoyed many fine views in her vintage Astro-Physics 130mm refractor. This is a wonderful part of our hobby —that manufacturers, magazine writers and the like are accessible and approachable to everyone.

The second evening NHAS was there in force, our canopy was up, and we had several scopes set up nearby. A group of people came by and asked if any of us had been there the year before, and in fact most of us had been. These people had been there last year and had gotten their first telescopic views ever through NHAS member scopes and came by to thank us warmly again for sharing with them.

Saturday we had our cookout going, NHAS members happily putting away burgers and dogs and chicken served up by **Joel Harris** and **Bill Steele**. The weather kept closing in and eventually lightning streaked across the western sky, which sent us scurrying at record pace to tear down the canopy and pack it away in my truck before it all got wet. Then the sky opened and the rain came, some decided to attend the remaining talks, while others ,myself included left early. And so ended another year at the convention.

✶ Gardner Gerry
NHAS President 2008

Highlights for this Month

You just read our President's report on the annual NHAS trek to Stellafane. More information on this event (including pictures) appears later in this Newsletter.

The final four of our scheduled sky watches for the MBC Summer Camp in Contoocook NH were scheduled in this reporting period. Two of them actually took place (one by accident). In all, four of the scheduled six MBC sky watches actually were held, which is a minor miracle considering the horrible sky conditions this summer (one of the very wettest on record).

Anyone who has been paying attention to the celestial calendar knows that a total solar eclipse was predicted for 1 August along a line stretching from the Arctic through Western Siberia, and into western China. Our own **John Blackwell** was in Novosibirsk to view the eclipse, and he gives us his report, with photographs.

NHAS put on other public observing events: our annual sky watch for the Goffstown Public Library; a solar observing event for the Currier Museum Art Center; and other random acts of Astronomy. Enjoy, all, and clear skies (please!).

✶ Paul Winalski
NHAS Secretary 2008

Astro Photons

The intrepid NHAS imaging corps continue to work in producing wonderful images. Please feel free to visit the NHAS pictures forum to see the latest postings.

✶ Gardner Gerry

CMP August Sky Watch

Friday I went to represent NHAS at CMP for the sky watch. Had 16 or 17 people and just me and a BUNCH of clouds. They appreciated my trying to track down objects that kept disappearing behind the numerous clouds. Jupiter eventually showed up, and I was able to show brief glimpses of M13, M27, T Lyrae and several double stars. About half of those that were there really seemed to enjoy it even though the viewing was poor.

✶ Ken Charles

My thanks, on behalf of all of NHAS, to Ken for keeping the faith (I admit it—I wimped out). We have had absolutely ghastly weather for the monthly scheduled CMP sky watches of late, and this has been the best one of late. We can only hope for better weather as fall

approaches (but I'm not holding my breath).

✶ Paul Winalski

MBC Summer Camp Concludes

The last four sky watches at the MBC Summer Camp in Contoocook, NH were scheduled to take place during this reporting period. Amazingly, given the overcast weather, we actually held two of them.

As recounted previously, the observing field here suffers from poor horizon visibility, but the skies are very clear—equivalent to what we have at YFOS. The kids (about 100, aged 6-18, arranged in approximately four groups of 25 by age) have been great. Well-behaved, interested, and asking some **very** good questions during the "What's in the Sky?" presentation I gave to the youngest group.

We have become something of a camp legend—each group of campers told the new campers that one of the highlights of the week would be the awesome telescopes showing up on Wednesday.

Our last viewing session here actually took place by accident. Due to an email misunderstanding, I showed up in Contoocook on Tuesday, 29 July, and gave, solo, a sky watch unanticipated either by the campers or NHAS. The good part was that the campers, and especially the camp staff afterwards, got to enjoy really clear skies. The bad, and really frustrating part for me, was that since I was alone I could only show one object each to the four groups of 25 campers who were there to observe. I chose Jupiter and M13. I only wish that more scopes were there—skies were very clear, and it was frustrating to only be able to show off one object to each group. I was able to show off more to the camp counselors later on.

All told, this has been a very successful series of sky watches for us. Four of the six scheduled sky watches took place (given the horrible weather, this is most unusual), the kids have been great, the venue is very good, and the response has been awesome.

I hope they have us back again next summer.

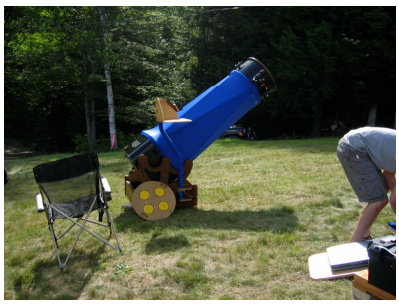
✶ Paul Winalski

Stellafane!

NHAS makes an annual pilgrimage to the oldest convention of amateur telescope makers (ATMs) in the world. Here, in pictures, are highlights of this year's Stellafane.

Setup at Stellafane (Joe Derek photo)

Those Earthlings make me sooo angry! (Joe Derek photo)



Big dob ready to go (Joe Derek Photo)

Mike Townsend, Joe Derek, and Chase McNiss pose with the 16" classical Cassegrain that won the "triple crown" of all three categories of the main scope construction competition. Two gentlemen from Connecticut designed and built the scope over a six-year period.

Gardner Gerry photo.

Here **Mike Townsend** checks out the spectroscopic view in an Alvan Clark 5" refractor. This is the same scope **Nils Wygant** and **Gardner Gerry** saw at the Clay Center for Science and Technology (see the June 2007 NHAS Observer). It is owned by Clark refractor collector and Clay Center faculty astronomer John Briggs.

Gardner Gerry photo.

I only wish I'd been there!

✶ Paul Winalski

Wonalancet Sky Watch

I volunteered to give a sky watch (can one "give" a sky watch?) [yes, one can—Ed.] to a small group of people in Wonalancet. These folks get together to discuss lofty topics once a year, and what loftier topic is there besides astronomy?

I found the unmarked dirt road the day before as it is only about 10 miles from where I live. The organizer and I decided to try Friday night, as Saturday looked to be monsoonal. Well, weather being

what it is around here, and particularly near the mountains, it was still risky, but like I said, it was close to home.

I got there about 9:30 [2 August] for a 10:00 staring time, to fit with their scheduled activities.

The view to the South was fantastic! We seemed to be looking down to Jupiter. The humidity was liquid, and my hair dryer and zapper were working overtime. I gave the usual tour of the circumpolar region, and threw in some mythology (please footnote "The Clash of the Titans" here).

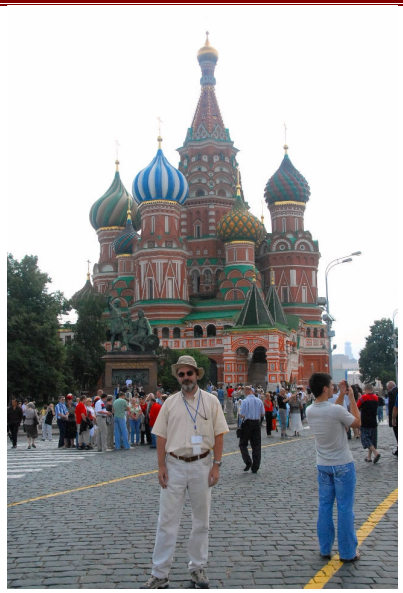
Clouds flew over at regular intervals, but in between we could plainly see all seven stars of the Little Bear. When I pointed my ever-popular green laser at the clouds, it hit! (ever popular even with this group... they all wanted to play with it!) There was a clear dot, not just the "off into the infinite beyond," as usual.

A good time was seemingly had by all and I packed up after 12.

✶ Marc Stowbridge

Eclipse Chasing in Siberia

With the pending eclipse of 1 August, I decided to go and chase it down. The reports from various agencies showed that the further south one went into Asia, the better the weather prospects looked for the eclipse date. I chose to head into Russia towards the city of Novosibirsk, the third largest city in the Russian Federation. To get there was an interesting process: Here in NH to Boston to New York to Helsinki to Moscow to Saint Petersburg to Novosibirsk! I can say that I have seen and experienced Russia, its beauty, its food, its people and language. I had prepped by taking a year of accelerated Russian language classes, and I can also say this helped a lot!



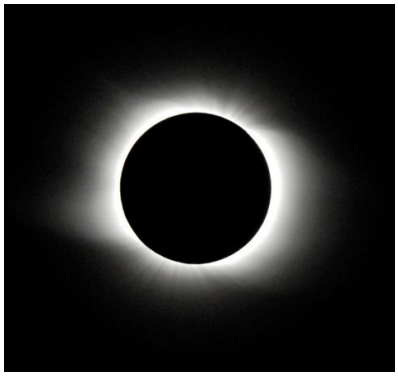
John Blackwell in front of St. Basil's Cathedral, Red Square, Moscow

To photograph the eclipse I brought along a Nikon D200 with plenty of memory and 300mm telephoto lens, a portable 80GB hard drive, a dual battery pack, remote control shutter control, a right angle viewer and a Bogen tripod with slow motion head. This turned out to be the right combination of gear: easily transported in a daypack style camera case and easy to get through security at the various airports along the way. The lens and tripod allowed the right image size and tracking control needed to follow the eclipse.

The eclipse site was at the northern shore of the huge Novosibirsk reservoir, a manmade lake which is a part of Russia's long Ob River. We arrived in the early afternoon to set up and get psyched for the event. Hundreds of other people were also within range from all walks of life. It was not immediately a joyous event, though: Clouds dominated the sky with some passing showers in the area. The wind was fierce, pushing through off the water at 30mph with higher gusts. Cameras would shake, and dust was an issue. Miraculously, the clouds not only parted, but evaporated completely into blue skies. The wind? It kept pounding us. The location offered two main spots to observe from: the beach, a sandy area with winds right off the water, and a promontory about 12m above the beach that had a 10m clearing then birch forest. I had set up on the edge of the cliff but thought better of it once the camera was coated in a fine powder of dirt being blown up the cliff. I moved back towards the trees just after taking the first contact images. This reduced wind effects, dirt, and offered shade until the big moment arrived.

Observing site at Novisibirsk (John Blackwell photo)

As totality approached, I fell into the moment, just watching without the camera. My intent was to capture the diamond ring on the way out. This was a good plan. As the eclipse reached totality, the "ooohs" and "ahhs" were quite frequent, the shadow of the Moon was clearly visible tracking across the water, and then the corona burst forth in a stunning display with faint tendrils and streamers. Through a telescope, three small pink prominences were also visible. In the 2 minutes and 20 seconds allotted. I then took TONS of images. I am happy with the results and with the trip as a whole.



Totality! (John Blackwell photo)

✶ John A.Blackwell

Currier Museum Art Center Sky Watch

The Currier Museum Art Center holds a summer day camp for kids, roughly grades 3-6. Their module for this summer was "cosmic oriented", and so they asked us to give them a (daytime) astronomy presentation.

I gave an extended version of the "what's in the night sky"slide show. I added more pictures of deep-sky objects, included the "solar system modeled on a football field" and "the speed of light, from light-nanosecond to light-year" slides from some of the Astro 101 presentations. I also included a sequence of spiral galaxies from face-on (M101, M51) through tilted (M81, M31) to edge-on (M104, NGC 891), to illustrate how our view of the Milky Way is that of a spiral galaxy, viewed from the inside. I finished with a few slides on the Sun—how it looks in visible light (sunspots from 1992), what it looks like in H-alpha, and a cut-away of the internal structure of the Sun.

This being an art center, I also threw in a slide of Van Gogh's "Starry Night over the Rhone", which shows the Big Dipper and Arcturus. I noted that, given the position that the artist depicted the constellation, we can determine what time of year he did the original sketches for the painting. The staff was delighted I'd included art references in the presentation, and it turned out they were studying Van Gogh that very week with the kids.

There were good questions from the kids. For example: "You said that this galaxy has a black hole in the center. Then why is the center so bright?" And: "How do we know that Alpha Centauri is 4.5 light-years away?" Answer: "Simple trigonometry. Next time you're in Geometry or Trig class and you get bored and think it's all pretty useless stuff, think again. It's by direct application of simple trigonometry that we know pretty accurately how far away Alpha Centauri is."

One of the kids asked specifically about the star representing the gorgon Medusa in the sky. I replied that, indeed, that was the wonderful eclipsing binary star Algol, but I hadn't included it in the presentation, since Perseus rises very late at night this time of year. I did find on my laptop an image of the famous (and repulsive!) Rubens painting of Medusa's Severed Head. Thus inspired, the kid knocked off an etching of Medusa's Head in the sky. I was really impressed!

The clouds held off enough so that the kids were all able to see solar prominences, naked eye, in H-alpha. I was most pleased with how this event turned out, and they sent us many sketches and letters of appreciation.

✶ Paul Winalski

Goffstown Public Library Sky Watch

The following is the list of NHAS members that were recorded last night at the Goffstown Public Library Sky watch on 23 July: **Bill Steele**, **Mike Townsend**, **John Rose**, **Paul Winalski**, **Rich DeMidio**, **Chase McNiss**, **Marc Stowbridge**, **Ken Charles**, **Ted Blank**, **Al Navarro**, and **Charley Vaillancourt**.

A family brought a Christmas gift that they couldn't get first light through since the gift was opened. The scope was a Meade refractor (looks like a department store product), looked like the SkySeeker picture I found on the Sears web site this morning.

The scope came with both covers and missing the eye pieces. I was off to get one of my EP when the father returned with the two that came with the Meade (9mm and 25mm). We tried to get a focus on a tree top to align the red dot finder. After some time I noticed that the 2X Barlow was installed between the draw tube and the diagonal. I removed the Barlow and bingo I could focus on a tree top then align the red dot finder.

At last they were very happy to get first light on Jupiter.

Mike helped a user with a Celestron 9.5—looked like a CPC. I don't have any details.

✶ Bill Steele

NHAS in the News

Tom Cocchiaro, who was instrumental in our obtaining a $5000 grant, reports that Fosters Daily Democrat and the Portsmouth Herald both recently ran photos and news articles on the grant.

NHAS July 2008 Business Meeting

ATM

No report.

YFOS

Larry Lopez reports that the Mosquito Magnet was working, but now is shut down (probably out of fuel). MMs are expensive to fix, but we can expect it to break down in 3-4 years. Someone mowed the lawn. According to **Herb Bubert**, the Gemini mount needs a battery.

Membership

Alan Shirey left a report on the three June educational workshops (DSOs, Carbon Stars, Stellar evouution). Four new members were introduced: **Jason Spencer**, **Scott McCartney**, **Stan Klemczak**, **Wendy Flagg**.

Astrophotography

No activity to report. People are still taking astroimages (see the website).

Radio Astronomy

No report.

Public Observing

Marc Stowbridge reported on upcoming sky watches at the MBC Summer Camp in Contoocook, Goffstown PublicLibrary (bring your DEET!), and Madison Old Home Week. Also a daytime lecture at the Currier Art Center in Manchester.

A solar observing session was held in Madison.

Marc presented his work-in-progress slide show on circimpolar constellations.

Webmaster

Mike O'Shaughnessy has set up a file site for us.

Book of the Month

Ted Blank presented Charles Woods's The Modern Moon, A Personal View✶ Paul Winalski.

Scope of the Month

Ken Charles presented Soulshine, his 11" Celestron f/10 Schmidt-Cassegrain. It is GPS computerized and tracks really well with either 1-star or 2-star alignment. Extra features that Ken added include a Moonlite focuser, Telrad, and counterweight bar. The sturdy tripod has a built-in level. The tripod weighs 18lb, and the scope itself 65 lb.

Stellafane Planning

Someone needs to bring up the club canopy. **Joel Harris** will do the cooking.

Evening Program

A delightful presentation of photos by club members including:

John Blackwell: NGC 7000, California Nebula, M88 galaxy cluster, Cave Nebula, M104, M101.

Dave Weaver: Comet 8P Tuttle, Comet Holmes, M106, M33.

Chase McNiss: Lots of Moon stuff: Northern Highlands, Clavius, Tycho region, Copernicus.

Rich Schuller: Jupiter system, three planets(Mars, Jupiter, Saturn), M8, NGC 7000, M51, Comet Holmes and Mirfak in conjunction, M31/M32/M110, Veil in H-alpha, Schwassmann Wachmann fragment C and M57 in conjunction.

John Buonomo: M45, California Nebula, M42, M81,. IC 410, IC 443, Veil Nebula, Rosette Nebula, YFOS setup.

Nils Wygant: M13, M27, Comet Maccholz, California Nebula, Umbra of 10-21-04 lunar eclipse, sunspots, Horsehead and flame nebula, M44.

Larry Lopez: Moon and Veil Nebula.

Gardner Gerry: M31/M32/M110, M101, M16, M17, full Veil Nebula, Maccholz in Cepheus, crescent Moon and earthshine.

Tim Printy: Comet Swant, Comet McNaught, Milky Way from Florida, Milky Way and Iridium flare at YFOS.

Tom Cocchiaro: Orion and ship on horizon, star sunset.

Herb Bubert: M97 and M108, NGC 2359 (Thor's Helmet), M20, Flame and Horse Head, M31/32/110, Mars, Saturn, Jupiter double transit sequence.

Paul Howard: Veil in H-alpha/S II/ O III, M27.

✶ Paul Winalski

The Bottom Line

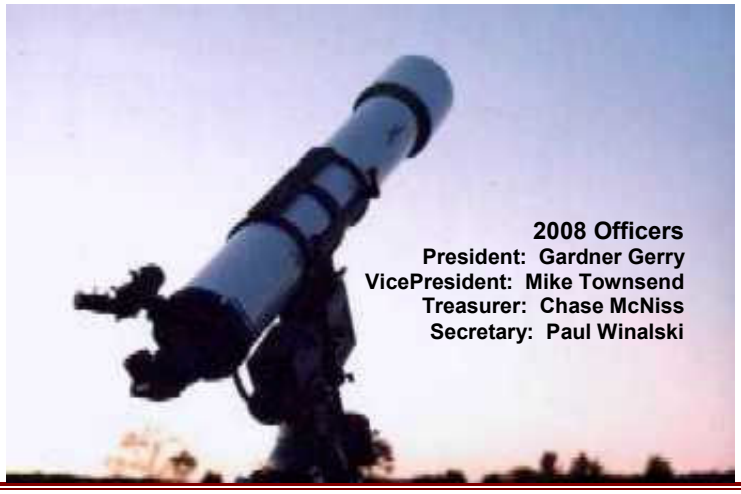
Starting Balance:	**$5292.45**
Deposits/Credits:	7.50
(membership)	
Accounts/Paid:	219.10
(Kalmbach Pub.; Penney Fence; Pro Portsmouth)	
Net Account Balance:	**$5080.85**
Petty cash drawer:	$100.00
Cash Balance:	**$5180.85**

2008 Membership: 133

New Members: **Craig Yankes,** Nasahua, NH

Donations:	**$0.00**
Balance of Grant Funds	**$809.70**

✶ Chase McNiss



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DEADLINE September 2008 Issue: 5 PM September 13
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NHAS
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Manchester, NH 03108-5823
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Use our web site:
http://www.nhastro.com/

This month's contributors:
Gardner Gerry, Ken Charles, Joe Derek, Marc Stowbridge, John Blackwell, Bill Steele, Tom Cocchiaro, Chase McNiss

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

NHAS Upcoming Events

Event	Date	Time	Location
NHAS Business Meeting	August 15	7:30 PM	Christa McAuliffe Planetarium
Astro 101: Lunar Observing	August 16	7:00 PM	YFOS
Astronomer's Conjunction	August 29-31	all day	Northfield MA
CMP Public Sky Watch	September 5	7:00 PM	Christa McAuliffe Planetarium
NHAS Business Meeting	September 12	7:30 PM	St. Anselm College
Coffee House Night	September 26	5:00 PM	YFOS