Observer Staff Editor & Publisher: Paul Winalski



Newsletter of the New Hampshire Astronomical Society

Vol. 2009 No. 7

"All the news that fits in print"



Cloudy Skies

circumstances. No member is authorized to act as an agent of the club without the prior permission of the officers. If in doubt, please ask an officer or myself.

Finally, I would be delinquent in my duties if I did not say anything about the horrible weather we had over the past month. I would be hard pressed to think of a worse cycle where visual viewing was not possible. To top it all off, while on vacation last week there was only one clear night and I was so tired from the activities during the day that I went straight to bed at dark ©

> ★ Rich DeMidio NHAS President 2009

Highlights for this Month

The past month has to have been one of the worst for clear skies in many years. Nevertheless, we did manage to hold some public outreach events. Let's hope the second half of July and the upcoming months have clearer skies.

> ★ Paul Winalski NHAS Secretary 2009

Astro Photons

It has been raining and not many members have been posting new work in the "Pictures" forum on the NHAS website.

★ Gardner Gerry

2009 Natural History Conference, Star Island

On Wed., 24 June I took my firstever trip to Star Island in the Isles of Shoals aboard the M/V *Uncle Oscar* out of Rye Harbor to present an

On the web at http://www.nhastro.com/

evening talk on Astronomy to the conferees at the 2009 Natural History Conference being held at the Oceanic Hotel on Star. This group of adult Natural History devotees has been gathering for a week of lectures, workshops, reading, writing and exploring the island every summer for more than thirty years, and some have attended every conference.

Just to set the scene, I started by showing the first five minutes of the famous Charles & Ray Eames film Powers of 10 which I'm sure most of you have seen. It pulls the camera back by ten times the previous distance each ten seconds. and you go from a picnic on the shore of Lake Michigan to beyond the Virgo Galaxy Cluster in about five minutes. From there I talked about the local neighborhood, the Moon and Solar System, what some of the "stars that aren't stars" might be (clusters, binaries, nebulae, etc.), the Cassini mission, including the Huygens descent movies (always a big hit), why the Moon shows phases, and a few other things, before wrapping it up some highlights from Saturn. We tried to do some observing but were completely shut in by clouds, so we had to settle for eating ice cream and talking.

I brought my big styrofoam Saturn model out in a white plastic garbage bag, and when one of the kids was offloading my gear on the island I heard him say to one of the other kids, "I thought that was a hat, but it's just Saturn." Pretty good!

Besides getting dive-bombed by protective mother seagulls when I

President's Message

One of the privileges as President is the power to make appointments for committee chairperson. It's a chance to acknowledge the hard work and contributions that a member illustrates. To that effect, I have appointed Bill Steele as the new membership chairman. Bill takes over from Alan Shirey, who has decided to take a well-deserved rest after three years of exemplary service to NHAS. The Membership Committee is an important aspect of our club with many activities. If anyone is interested in serving on that committee, please contact Bill directly. He has some great ideas that will require support to implement.

The quarterly officers' meeting will be held next week. Several important items are on the agenda including:

- the annual financial review
- empowering EOC
- website maintenance

Please contact any officer or myself if you have questions or comments regarding these or other aspects of NHAS operations.

The recent email traffic regarding the business model of a specific website compels me to remind everyone that NHAS is a non-profit organization subject to certain state laws and regulations. It is absolutely imperative that NHAS not take any position that could remotely be interpreted as political or commercial in nature. Members are free to pursue any endeavor that they wish, but they must not involve NHAS by name under any

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approached too close to their nests while walking around the island, the high point of the trip for me was getting to meet an elderly conferee who, in the 1960s, worked at MIT packaging electronics for the Apollo Moon missions. Her hands were the last human hands to touch some of the equipment before it went to the Moon. I thanked her on behalf of all of us for that dedicated work, and after shaking her hand I am now just one handshake away from touching the original Apollo spacecraft.

A gentleman named Al Doolittle, who had been a member of their conference for many years before passing away, used to bring a homemade 8" dob to every conference. His wife donated it to Star Island, and it now resides in the Natural History Lab building, along with a Bausch & Lomb 8" f/10 SCT (like a Criterion) with wedge and 110V motor drive, and a 3" refractor by Celestron on an alt-az mount with wooden legs. There are 4 eyepieces as well. The equipment is available for anyone to use, just check with the staff during the day if you ever overnight on the island.

I left brochures and handouts for NHAS along with documents with links to our website and other web information.

Star Island is a great place for a day trip, and they do offer "Personal Retreats" which essentially allow the public to stay overnight in spare rooms if a conference (of which there are many all summer, mostly Unitarian oriented) does not fill the entire place. I'll bring some information to the next club meeting.

★ Ted Blank

Library Telescope Program

The following report on our library telescope at New Durham appeared in the 2 July issue of *The Baysider*:

NEW DURHAM—What better way to kick off a summer reading program than to add an entirely new feature to the library? The New Durham Public Library has done just that with the purchase of a telescope to be loaned out. It supports the summer program Mad for Reading, based on fun science.

"Now we offer not only books, audio books, and movies, but an entire evening under the stars," Director Max Crowe announced. The purchase, under the auspices of the New Hampshire Astronomical Society, provides for a fully assembled, easy to use 4.5" astronomical telescope to be put into circulation just like a book.

The family-friendly unit has a wooden base so it can be placed on the ground or a bench, and despite being pint-sized, has a relatively large optical tube that provides detailed viewing of the Moon's craters, and of planets. "Patrons may borrow the telescope for two nights," Crowe said. "It will be available beginning the Fourth of July weekend."

The summer reading program begins next Tuesday. Although preregistration is not mandatory, Crowe urges parents to get permission slips in to the library before the session starts. Slips were sent home from the New Durham School and are also available at the library. The first four sessions take place on Tuesdays during July, from 1 to 3 p.m. at the library. Participants will explore the senses, the brain, animals, chemistry and physical science through entertainment, guests, activities, simple experiments, cinema, and art projects.

Drop-in days on July 31 and Aug. 1 will include a giant maze on the front lawn, super bubbles, hands-on experiments, microscopes and crafts. The new telescope will also be a highlight of the summer reading program's grand finale on Aug. 7 at 7 p.m., which will feature an astronomy presentation and stargazing. Stars of another form will also appear that evening when the program's mad scientist movie, about young "research assistants" who help correct a mad scientist's mutation of a slug, has its premiere.

The free program is open to those who have completed kindergarten

through sixth grade. Kids can attend one, all, or any number of sessions, and read whatever books they wish. Call the library at 859-2201 for more information.

★ Marc Stowbridge

Recent Public Sky Watches

Cub Scout Pack 610, Raymond, NH



I gave a talk to the Cub Scouts for the Rochester Pack on Thursday, 16 July. Their theme was "Space Camp", with all sorts of astronomical stuff going on. I spoke to two groups of twenty-five or so kids. They were very attentive and quite well behaved! We took a look at the three basic types of telescopes and they were able to read a sign across the fair grounds though the LX90. They were able to learn enough to meet at least some of the requirements for their loops and pins.

★ Marc Stowbridge

NH Dark Sky Legislation Is Now the Law

Governor Lynch today signed HB 585, the Outdoor Lighting Efficiency Act.

The bill, which takes effect in sixty days, sets a New Hampshire state policy of preservation of dark skies; requires state agencies to install fully shielded lighting in all new and replacement state-funded lighting (unless they can show that doing so would increase costs or compromise safety—both unlikely); and requiring utilities to provide fully shielded fixtures as the default option for all new and replacement

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streetlights (though towns can opt out if they wish.)

Also, the bill requires PUC to set a "midnight rate" under which towns may ask their utilities to install timers on selected streetlights to turn them off at midnight, saving half the energy consumed. PUC has estimated a potential savings to NH towns of up to \$1 million per year in operating costs.

The bill may not do everything one might like—such as regulating illuminated billboards—but it's a significant step forward.

★ Bob Gillette

NHAS June 2009 Business Meeting

Board of Directors Report

Mike O'Shaughnessy reports that the Board is looking at budgeted income and outgo in light of the new insurance policy. The Board will report back to the membership when the analysis is completed in a month or two.

Public Observing

Marc Stowbridge reports that weather was rainy and windy for the Girl Scout sky watch at Camp Chenoa on 13 June. They settled for a presentation in the craft pavilion, and gazing at magnified views through the window.

The fifth telescope for the Library Telescope Program has been ordered. There are still perpetually at least ten people on the waiting lists at Tamworth and Moultonborough. Two schools and one more library have expressed interest in the program.

There was discussion of NHAS giving Goffstown Library a telescope, in recognition of our long relationship holding public sky watches. It would be nice if we had the scope in time for the upcoming Goffstown sky watch in July.

Tom Cocchiaro thanked those who volunteered at Portsmouth. There were 60,000 people at the event. The telescopes were in constant use. About 1,000 people viewed the Sun through our solar scopes. All of the handout materials were distributed.

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Matt Amar and Joe Derek put on an event—indoors, alas, due to the weather—for fifty scouts, parents, and leaders of Cub Scout Pack 610. Joe brought his 12.5" equatorially mounted reflector. Matt gave a talk on planets and other things in the sky.

Educational Outreach

Matt Amar reported that the EOC discussed a possible funding problem with Market Square Day and Astronomy Day expenditures. The EOC is looking into the use of ulocal for an Internet presence for NHAS.

The update of the web page has been stalled a bit; EOC wants to see it move forward. There is some behind the scenes work that needs to be done.

It was proposed that we establish a line item in NHAS's financial books for funds earmarked for educational outreach.

Perhaps we should have a collection box at sky watches?

Membership

Two new members were present: **Barry Sawyer** of Plymouth NH and **John** (sorry—didn't catch the last name) of Hampton NH.

The "pull model" whereby members request Astro 101/201 courses didn't seem to work, so we will be scheduling some Astro 101 courses in the near future.

ATM

Larry Lopez reported that one of the club loaner scope needs some work. There hasn't been any ATM related meeting in a while.

YFOS

Larry Lopez reported that the annual spring cleaning was held on 30 May. The mosquito magnet is operating irrationally. Herb Bubert cleaned out the warming hut. Chase McNiss scrubbed the floor. Joe Schmidl did observatory cleanup and painting. Steve Forbes mowed the field.

The south panels on the observatory are showing rot damage. The trim around the observatory front door needs repainting twice a year. We will have a work session to fix the south panels in the next couple of weeks.

Astrophotography

Gardner Gerry said that it has been cloudy and therefore there is not much to report.

Webmaster

No report.

Scope of the Month

Chase McNiss presented his 6" achromat made by Astro Telescope (Kun Ming Optics in China), a 152mm f/5.9. It does exhibit chromatic aberration but it is well controlled. The bare, metal tube OTA weighs 25 pounds. Chase bought this to be a sky watch telescope to observe open clusters, etc. The scope has a very smooth 11:1 Crayford focuser. It is highly recommended for the combination of aperture and portability.

Book of the Month

Mike O'Shaughnessy presented <u>Capturing the Stars</u> <u>Astrophotography by the Masters</u> by Robert Gandler (Voyager Press, ISBN 978-0-7603-3500-0). It is a book of wonderful images captured by about two dozen of the top astrophotographers.

Miscellaneous Business

We will be doing Astro 101 course scheduling over the next months.

There has been some confusion over the booking of speakers for NHAS business meetings. Keep in mind that you must coordinate with the President for all meeting speakers.

Please remember to sign into the logbook when you visit YFOS. Be sure to carry out your rubbish when you leave. If you use the rubbish bag on the site, remove it and replace it with a clean one.

Evening Program

Christine Pulliam of the Harvard-Smithsonian Center for Astrophysics presented "Finding Alien Worlds . . . and Life?". 353 exoplanets have been discovered so far, but we have searched only a tiny part of the galaxy (out a few hundred light years). The talk focused on the alien worlds that

we've found, how we find them, and why it's so challenging. And once we have worlds, what about life?

★ Bill Steele

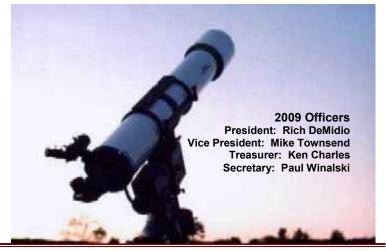
The Bottom Line

Dave Weaver donated \$100 towards the purchase of the Lunt solar telescope.

Starting Balance:	\$5530.13
Deposits/Credits:	
Membership:	75.00
Donations:	100.00
Bank interest:	2.82
Mugs:	10.00
Total :	187.82
Accounts/Paid:	
Insurance:	98.67
Handy House:	54.30
Pro Portsmouth:	260.00
Total:	412.97
Net Account Balance:	\$5304.98
Petty cash drawer:	\$100.00
Cash Balance:	\$5404.98

Membership: 125

New members: John Russell, Bedford NH Evan McCartney, Concord NH Scott Tierno, Candia NH Krista Couturier, Deering NH Ken Charles



DEADLINE August 2009 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

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

This month's contributors:

Rich DeMidio, Gardner Gerry, Ted Blank, Marc Stowbridge, Bob Gillette, Ken Charles

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NHAS Upcoming Events

Event	Date	Time	Location
Goffstown Public Library Sky Watch	July 22	8:30 PM	Cemetary Field, Rte. 114, Goffstown NH
Coffee House Night	July 24	7:00 PM	YFOS
Seabrook Public Library Sky Watch	July 30	7:30 PM	Seabrook Public Library, Seabrook NH
Madison Old Home Week Sky Watch	August 5	8:00 PM	Madison, NH
Discovery Center Public Sky Watch	August 7	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
New Durham Library Sky Watch	August 7	7:30 PM	New Durham Public Library, New Durham NH
Stellafane	August 13-15	all day	Springfield, VT
Educational Outreach Ctte. Meeting	August 14	6:30 PM	Ralph Pill Building, Concord NH
NHAS Business Meeting	August 21	7:30 PM	McAuliffe-Shepard Discovery Center, Concord NH
Dunstable Public Library Sky Watch	August 26	7:00 PM	Dunstable Town Common, Dunstable NH
Coffee House Night	August 28	7:00 PM	YFOS