Observer Staff Editor & Publisher: Paul Winalski





Newsletter of the New Hampshire Astronomical Society

Vol. 2010 No. 4

"All the news that fits in print"

April 2010

Messier Marathon 2010

President's Message

Ok, who bought the new telescope? Or is it NEAF that is having a residual effect, for the weather has been quite awful for observing and delivering public sky watches. As a result, we have quite a backlog, some of which are conflicting with some NHAS events. I want to emphasize the importance of supporting these events and making sure that they get properly staffed. Please monitor email threads and everyone please make that extra effort so that we have coverage when conflicts occur.

We are only a few weeks away from the Aerospacefest 2010 event in which NHAS is participating in collaboration with the McAuliffe-Shepard Discovery Center. If you are interested in helping and do not know how, please contact **Ted Blank** who is our coordinator for the event. He and his team have several tasks defined that folks can choose from to help. Please monitor email for further updates or contact Ted for any questions that you have.

I would like to thank Larry and Linda Lopez for once again hosting a wonderful Messier Marathon event Saturday April 10th. I was allowed to attend with my dried beef as the password, ⊚ the weather cooperated, and we had a great turnout. I had to leave at midnight to fly out on business the next day while it was still clear. I was tempted to stay. Unfortunately, I was compelled to leave for the greater good. Please visit the internal forum

http://www.nhastro.com/member/fo rum/viewtopic.php?t=1359 for detailed reports and results.

Due to some personal conflicts, the Q2 officer meeting has been pushed back to May 8th. We have some important topics to discuss pertaining to club business. If anyone has specific items you wish addressed, please contact an officer or myself. I will do my best to get it on the agenda. Results will be published in the May or June Newsletter with an update to key decisions presented at a future business meeting.

Clear Skies,

★ Rich DeMidio NHAS President 2010

Highlights for This Month

The 2010 Messier Marathon, after being clouded out in March, took place on 10 April. Observing conditions weren't ideal, but the hospitality, food, and companionship as always were excellent.

20 March was International Sidewalk Astronomy Night. NHAS celebrated with another very successful sidewalk astronomy event in Portsmouth.

We had a very crowded public observing calendar this past month, but for a change the weather cooperated and we were able to hold most of the scheduled sky watches.

★ Paul Winalski NHAS Secretary 2010

2010 Messier Marathon



Tom Cocciaro and Joe Derek enjoy the food and company. (Herb Bubert photos)

Larry Lopez reports that the event got off to a slow start, with the first participant (Gardner Gerry) not arriving until 5:30 PM. Ed Ting reports seeing 22 Messier objects, all in other people's scopes. David Gilmore bagged three. Herb Bubert reports finding 68 objects unassisted by go-to technology.

★ Paul Winalski



MM 2010 observing field.

This was my first attendance of the MM. There always seems to be something in March that conflicts with that Friday. I didn't keep a rigorous tally but I saw something like 20 or so. Lots of good food and conversation. Truly a fun event!



Refractors were popular this year.

Next time, I'll kick up the heat a little more in the chili with hopes to do Steve Forbes proud. (for those who are light-weights, I'll still make the mild version)



Rich Schueller and Larry Lopez with the Ceravolo 300mm Astrograph in Broken Tooth Rock Observatory

The MM really makes one aware of how well you know the sky. If it weren't for the fact I've imaged a few of these recently, I would have been totally lost, like in the Virgo group. (I saw a good many in there but I didn't know which I was looking at). This may take a couple of years to become proficient.

* Rich Schueller

Bicentennial Elementary School Sky Watch, Nashua NH, 16 March

Present were John Bishop, Ken Charles, Joe Derek, Brian and Joyce Icaza, Al Navarro, Jr., John Rose, Gardner Gerry, and Mike Townsend.

They didn't have a presenter, so I volunteered and gave a talk of about forty minutes on what they were likely to see, some constellations, and some rules of being at a sky watch. It was well received.

This was a fifth-grade event, so most of the kids were that age or had siblings of that age. It was a crowd of about forty, at a guess.

The site had good and bad aspects:

- 1. Very convenient parking, good surface (dry wood chips);
- 2. Too many lights; they could get some turned off, but only for a while (there was a timer), so they went back on twice;
- 3. Trees all around restricted the view.

The sky was clear, quite dark and had good seeing.

I had my OA-6.5 on a platform and showed Mars: even though the planet was only 10.5 arc-seconds in diameter, the dark spot of Sytris Major and the light fleck of the North polar cap were both visible (to me and to the viewers).

I also showed doubles and open clusters and M42. Ken was showing globulars as well. Late in the evening (about 9 PM) he showed Saturn, though that meant looking through trees—the rings were visible nonetheless, and it was the usual crowd-pleaser.

M1 was edge-of-madness visible so I didn't show it, but it was visible, which is a guide to the quality of the night.

★ John Bishop

John Bishop gave the talk beforehand to the parents and kids, and they parents About 75 people showed up and were very enthusiastic. The sky was very good, considering all the rain we had just had. The early arrivals got views of Venus, M42, M37, M35, Mars and other bright objects. John Bishop used some filters on his scope for views of the polar cap on Mars. Kids bounced from scope to scope, as is typical at the sky watches for younger kids. About an hour and a half after we started. I was able to get views of Saturn for them through the trees to the southeast. They loved it! Especially some of the parents who had never seen Saturn before. Even with the poor view, low down and

through the trees, they couldn't believe the it wasn't a picture on front of the scope.

From Tanya Ackerman's thank you e-mail to Marc a day or so later:

"What an amazing night!! Your friends did a terrific job once again! The kids came in this morning telling stories of what they saw to their teachers and peers. I wanted to thank John for taking the time to start things off and he did a wonderful job. Parents and students were impressed with his depth of knowledge and his ability to interact with the kids. All the volunteers were just so informative and gave the kids insight to a subject they may not have known much about. Again, thank you for taking the time to come to our school on such a beautiful night!"

> Tanya Ackerman Bicentennial School

> > **★** Ken Charles

Sun-Earth Day, McAuliffe-Shepard Discovery Center, Concord NH, 20 March



Solar scopes set up outside the entrance to the MSDC. (Dave Weaver photo)



Rich Schueller sets up the NHAS Lunt Hα scope. (Dave Weaver photo)

The Discovery Center celebrated the vernal equinox with a daytime event they dubbed Sun-Earth Day. Visitors participated in solar science experiments and demonstrations including magnetism, IR an UV light, spectroscopy, and a discussion of the 2012 "end of the world" hoax.



Solar observing through the MSDC 14" Schmidt-Cassegrain (Dave Weaver photo)

There was solar observing in white light and $H\alpha$ both in the observatory and on the sidewalk. Several NHAS members brought scopes for solar observing.

★ Paul Winalski

International Sidewalk Astronomy Night, Portsmouth NH, 20 March

NHAS members in the Seacoast of New Hampshire, and one from central NH. celebrated International Sidewalk Astronomy Night March 20 with a sky watch in Portsmouth's Market Square. Herb Bubert, Jim Moe, Tim Mauro, and Tom Cocchiaro were mobbed by hundreds of curious onlookers as they set up scopes just outside the front door of Breaking New Grounds and RiRa's Irish Pub around 7:45 PM. Warm temperatures and Spring fever drew larger-than-normal crowds of people to the downtown for a Spring Equinox eve of fun and partying—in fact, even at 9 p.m.

there was nary a parking space in the downtown or the parking garage. Many of those visitors stopped by to ask if there was anything special going on in the sky.

While the Clear Sky Clock didn't look encouraging, the skies cleared enough for long views of the Moon and Pleiades as they courted one another through the sky. The team also gave long lines of the curious glimpses of Mars, Saturn, the Orion Nebula, M35 and the Perseus Double Cluster—despite the glaring flood lights trained on the white steeple of the Old North Church and dozens of gaslight-style street lights. Saturn proved to be the star (planet) of the show as it rose over RiRa's Romanesque stone gable around 10 PM. Many of the folks waiting in long lines at the popular downtown pub ran over to get a glimpse of Saturn and then switched places with friends so they could get a chance to spy the ringed beauty. Comments ranged from, "no way, you taped a stencil to the front of the telescope," to "oh my God, oh my God" and well...how can you quote speechlessness. Many who had never seen the Moon through a telescope before were mesmerized and had to be peeled away By hungry parents headed for a restaurant meal and friends who wanted their chance at the eyepiece. Many came back again and again for views through the four scopes, which, oddly enough, represented nearly every type on the market—a refractor, Dobsonian, Schmidt-Cassegrain and a Maksutov. A few expressed their sincere appreciation to our group for coming out and sharing the heavens with the public, and an interest in making contributions to the cause.

While it may be normal for members observing at YFOS to stay through the wee hours of the morning, few sky watch-style events make it past 10 PM. But that wasn't the way it went for the members of the Portsmouth ISAN group, who didn't leave Market Square until well past 12 bongs on

the North Church clock tower—a testament to the interest of Seacoast citizens in the wonders of the universe.

★ Tom Cocchiaro

Madison Library Telescope, 31 March

As soon as my niece heard about the Library Telescope Project, she wanted to make a contribution. She provided funds for an entire package, as well as for additional books and materials.

The town of Madison hosts a sky watch in August and has always been supportive to the cause. Also, my wife is the Postmaster in Silver Lake, just down the street. As his niece is quite fond of her Aunt Sue, she dedicated the telescope in her honor.

This package is the latest and greatest, having a zoom lens, a Moon map on the OTA, and an Audubon Constellations pocket guide in the pouch, and a miniplanisphere. All the bits and pieces are contained in the pouch or are connected to the scope, so there is only one thing to carry.



Leonora Southwick, Mary Cronin, and Sue Stowbridge with the new Madison Library telescope (Marc Stowbridge photo)

Also given to the library was another book on observing, and a copy of H.A.Ray's The Stars.

My niece is a wonderful person, and has great sympathy for my wife.

★ Marc Stowbridge

McAuliffe-Shepard Discovery Center Sky

Watch, Concord NH, 2 April

I was there with several other NHAS members for our monthly public sky watch at the Discovery Center. Several of the public brought their own telescopes. **Ted Blank** and I helped a few of them collimate their scopes and otherwise sort them out. A few achieved first light with them at this event.

Sky conditions were good—mostly clear with some background haze. I showed a 10X view of the whole Pleiades in the TeleVue 85mm refractor. With the 14" TScope reflector I showed mainly open clusters and double stars. Seeing was exceptionally steady and doubles that are usually difficult were easy to split.

Saturn, as always, was a very popular object with the public. The steady seeing provided excellent views. Three moons were visible in the TScope. **Gardner Gerry** had by far the best view of Saturn in his Takahashi 106mm FSQ refractor.

I was especially delighted by the number of people bringing their own scopes. I think one of the most valuable public outreach services we can provide is helping folks learn how to operate their own scopes.

Rich DeMidio received this note of appreciation:

"I am a Physics teacher at the Tilton School in Tilton. I brought 22 of our students to your sky watch last night. I had done this once before and, once again, found it to be both fun and educational. The kids LOVED it. So, many thanks to the NHAS. Your members were passionate, patient, and generous with both their knowledge and time. Our school's headmaster, Jim Clements, also tagged along, with his wife, and they were just as impressed as the students. We were wondering if a sky watch could be held at our school sometime. April 23rd? Just a thought!

"Again, many thanks!

Rick Honer"

★Paul Winalski

Bedford High School Sky Watch, 6 April

NHAS members present: Herb Bubert, Ken Charles, Joe Derek, Gardner Gerry, Rich Schueller, Bill Steele, Ed Ting, Mike Townsend. Besides Andrew DiGiovanni from the school, the Principal and Vice-Principal were there, along with thirty or so students. Sky was below average, with a haze and clouds most the night, and a large light dome to the east (Manchester). We were able to show Saturn, Mars, M42, M37, M35, M81, M82, Venus, and Mercury along with a few other objects. The kids all had a good time and ask some good questions. Very evident that they were studying the subject in school. The sky watch ended at 10:00 PM or thereabouts.

★Ken Charles

The Perseus Double Cluster, M42, M3, M81, M35, M36, M37, M44 were all mentioned. Andrew DiGiovanni said the students were able to view Mercury, Venus, Mars, Saturn, and Earth as planets.

The astronomy students were provided instructions on setup, collimating, night sky orientation, and polar alignment.

★Bill Steele

When I arrived around 7:30, quite a few NHAs Members were setting up. We had attendees from two of the high school classes: the Astronomy class and the Physics class.

Early on the skies were not cooperating, providing sucker holes where one could just catch a glimpse of Mars, Aldebaran or Sirius. About 8:00 the skies finally cleared enough to view some other interesting objects such as the Pleadies and Saturn (always a WOW!).

I spent some time talking with David, a student in the Astronomy class. I asked what topics they were covering in school. He told me they were currently studying orbits and he was still trying to understand it all. When I asked what specifically he could remember he quoted Kepler's second law—a planet's orbit sweeps out equal areas in equal times. He didn't really understand why it moved faster closer to the primary and I explained that the planet was falling "downhill" as it moves closer and is "going up hill" as it moves away. I likened it to a marble on a couple of ramps, it starts out moving slowly at the top of the first ramp, picks up speed as it rolls down, then looses speed going up the second ramp. I could see the light turn on in his head as he understood.

It was a great time and conversation with a student who is into learning, and fun to help him understand what he's learning.

★Rich Schueller

Thorntons Ferry Sky Watch, Merrimack NH, 14 April

There was a large crowd, showing up in two waves. The children were young but very well behaved. There were lots of positive comments despite long lines at each telescope.

The sky was ok; I showed Saturn and Mars; Al N. showed Venus and Mercury early in the evening.
NHAS Members present: John Bishop, Steve DiPirro, Gardner Gerry, Peter Kelly, Al Navarro, Mike O'Shaughnessy, Rich Schueller, Bill Steele, Ed Ting.

★ John Bishop



John Bishop points out Venus. (Gardner Gerry photo)

Everyone else set up in the middle of the playground, so I was able to setup the 12" Lightbridge where the

large tree would not block Venus. So, very early in the evening I could show off Venus (Mr. Bishop gladly let me borrow a blue filter to remove the glare for this purpose). After a short while, I got to thinking... hmmm... Mercury is also in that area some where... So, I put in the 17.5mm and started scanning the area below and to the right of Venus. Sure enough—there it was! So I had the chance to show off the thin crescent of Mercury for about 30-45min before it disappeared in the trees.



Observing Venus and Mercury in Al Navarro's scope. (Gardner Gerry photo)

After that I showed Saturn to a few people, and then back to Venus, until it set, then over to M42 for the rest of the evening. Overall I probably had at least 50-75 people go through my scope.

A WONDERFUL night!

★ Al Navarro



Steve DiPirro shares a view of Venus. (Gardner Gerry photo)

There were about 150 third graders from the Thorntons Ferry and Mastricola Schools in attendance. Many parents and younger siblings who were also enjoying their time looking through the telescopes accompanied the school kids.



Mike O'Shaughnessy sets up. (Rich Schueller photo)

One of the teachers said interest seems to grow each year as parents come to anticipate the event.

Ed Ting provided a talk prior to the kids coming outside to the telescopes. And when the doors opened, it was like the running of the bulls—enthusiastic kids charging out to get in line at one of the eight scopes.



Gardner Gerry sets up to view Mars. (Rich Schueller photo)

Al Navarro was positioned to offer views of Mercury and Venus as they sank toward the tree line.

The others focused on Mars, Saturn, the Great Orion Nebula, and double stars. The children were quite inquisitive and well behaved, asking great questions and exclaiming "WOW!" when getting their first glimpses of "real planets".

Many of the parents asked questions about the objects they were seeing. Some asked about scopes they had around the house. The question, "Can I see the [Saturn's] rings with my scope too?" lead to a good discussion and educational opportunity about scopes, their capabilities and limitations. I was surprised to hear her mention "a Wal-Mart scope" and describe what might be a 4" Newtonian. Her father gave it to her because he

wasn't using it and she lived out in the country.

One person asked about being able to see a greenish color on mars mentioned previously. To this Garnder responded with, "Not in THIS scope!" with a huge smile and a hearty laugh.

The crowds dispersed around 9 PM and the parking lot was once again left to fend for itself during the night.

★Rich Schueller

NHAS March 2010 Business Meeting

The meeting took place on 19 March at St. Anselm College. The club President and Secretary were unable to attend, so Vice President **Mike Townsend** presided and **Bill Steele** took the minutes.

Board of Directors

John Rose reported that a board meeting was held last week. A member's wish list was created. The asset list was passed to the web committee. The bailment form needs to be hard copy as processing online doesn't meet legal requirements.

AstroFest 2010

Rich Schueller pointed out that we still need volunteers. Contact the Educational Outreach Committee if interested.

YFOS

Larry Lopez reported that YFOS is in good condition. We need volunteers for mowing.

Public Observing

In celebration of International Sidewalk Astronomy Day, we will be holding sidewalk astronomy events on Saturday 20 March in Hooksett (at the Regal Theater; four scopes will attend) and Portsmouth (Market Square).

Educational Outreach

Rich Schueller reported that the next meeting of the EOC is Friday 26 March.

Work on the new website is in progress and the new site is

\$7373.62

estimated to be on line before Astronomy Day.

Webmaster

Matt Marulla reports that he needs several officer biographies for the new website. Event calendar users will need one-on-one training.

Scope of the Month

Mike Townsend presented an Orion 8-inch reflector for photography. There is a touch of astigmatism that he fixed by backing off the tightness of the mirror clips and recollimation. The scope is very easy to collimate because of the short tube length. It doesn't do well with Plössl eyepieces. Mike suggested getting a coma corrector for photographic use. Mike did install flocking around the eyepiece and secondary.

Book of the Month

Rich Schueller presented 100 Best Targets for Photography for the Year by Ruben Kier (Springer Publishing, ISBN 978-4419-0602-1, price \$35.00). Rich likes the layout of the book, which is in very good order to plan observing sessions.

Evening Presentation

Larry Lopez gave a presentation on the Messier Marathon, due to take place on 9 April.

Gardner Gerry presented a slide show on the Winter Star Party, which takes place in February at a Girl Scout camp in the Florida Keys. It is 19 degrees further south than New Hampshire, which makes objects near the southern horizon easier to see.

Gardner and Rich Schueller went together and had started planning in the summer of 2009. They rented a Chicky hut. To get there you can drive the whole way, or take the auto-train, or fly. Rich and Gardner took the train (cost \$1150 for car and sleeper for two). The train is still 6½ hours' drive south from the station. For sightseeing they went to the Astronaut Hall of Fame Museum and NASA.

★ Bill Steele

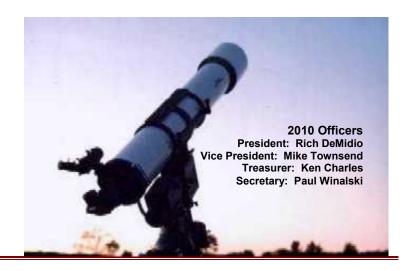
The Bottom Line

Starting Balance: Deposits/Credits: Membership: 150.00 Donations: 20.00 Bank interest: 1.75 Total: 171.75 Accounts/Paid: Insurance: 415.00 Cynric Company, LLC: 173.25 Total: 588.25 **Net Account Balance:** \$6957.12 Petty cash drawer: \$100.00 Cash Balance: \$7057.12

Membership: 125

New Members: David Brisson, Manchester NH Ian Geoffrey Ross, West Lebanon

> **★** Ken Charles NHAS Treasurer 2010



DEADLINE May 2010 Issue: 5 PM May 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:

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Attn: Treasurer

Send E-mail to:
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Use our web site:
http://www.nhastro.com/

This month's contributors:

Rich DeMidio, Rich Schueller, John Bishop, Ken Charles, Tom Cocchiaro, Marc Stowbridge, Bill Steele, Al Navarro

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

NHAS Upcoming Events

Event	Date	Time	Location
Langdon Library Sky Watch	April 20	5:00 PM	Langdon Library, Newington NH
Goffstown High School Observing Night	April 22	7:00 PM	Goffstown High School, Goffstown NH
AstroFest 2010 Sky Watch	April 30	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
AstroFest 2010 Daytime Activities	May 1-2	10:00 AM	McAuliffe-Shepard Discovery Center, Concord NH
Discovery Center Sky Watch	May 7	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Mount St. Mary's Kindergarten Sky Watch	May 13	7:30 PM	Mount St. Mary's, Hooksett NH
New Durham Public Library Sky Watch	May 14	7:00 PM	New Durham NH
NHAS Business Meeting	May 21	7:30 PM	St. Anselm College, Manchester NH
Mary E. Bartlett Library Sky Watch	May 22 (?)	7:00 PM	Brentwood, NH
Discovery Center Sky Watch	June 4	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Madison Library Sky Watch	June 10	7:00 PM	Madison Library, Madison NH
NHAS Coffee House Night	June 11	5:00 PM	YFOS