



Nashua Winter Holiday Stroll

Nominations for 2013 NHAS Officers

At the November business meeting, these nominations were made and seconded:

President: **Rich DeMidio**

Vice President: **Tom Cocchiaro**

Secretary: no nominations

Treasurer: **David Gilmore**

Director: **Ken Charles**

The floor will be open for further nominations at the December business meeting, after which the voting will take place. Consider whether you might want to serve, or to nominate somebody, for the offices. Because of term limit provisions in our by-laws, our current President (**John Bishop**) and Vice President (**David Gilmore**) cannot serve a third consecutive term in their respective offices.

All offices serve one-year terms except for the Director, who serves a three-year term. The floor will be open for further nominations at the December meeting, and then the voting will take place.

* Paul Winalski

Cub Scout Pack 610 Sky Watch, Pelham NH, 17 November 2012

The event took place as planned. **Gardner Gerry**, **Ed Ting**, and **Paul Winalski** were there from NHAS. We had a big crowd of Scouts and parents—at least the seventy-five expected, perhaps more. Gardner gave a brief presentation of the Earth-Moon

distance before the observing started.

The Pelham Fish & Game Club site is excellent—no artificial lighting and exceptional horizon visibility. Seeing was steady but transparency deteriorated as time progressed and there is a good bit of light pollution.

I showed Jupiter at first, and several of the Scouts got to see Io emerge from behind the planet (or at least got before-and-after views). Once everyone had seen Jupiter, I switched to the Double Cluster, M31/M32, and 61 Cygni.

* Paul Winalski

Campbell High School Sky Watch, Litchfield NH, 19 November 2012

Third time's charmed—after two postponements, we got clear, albeit damp and somewhat hazy, skies under a first quarter Moon, and this event finally took place. About 25 students and parents attended.

Gardner Gerry gave the indoor presentation and was there with his 9-1/2" Celestron. I brought Mr. T. the 14" TScope, and **Ed Ting** had his 8" dob. Ed concentrated on the Moon, Gardner on Jupiter, and I showed various deep-sky objects: the Pleiades, the Perseus Double Cluster, M31/M32, NGC 457, 61 Cygni, WZ Cassiopeiae, and γ Arietis.

The organizers were able to get the parking lot lights turned off behind the school and that made all the difference. There was just one floodlight on the school itself to contend with, and it was but a minor annoyance. I'd like to be back here

with the skies less hazy, and without the Moon.

* Paul Winalski

Winter Holiday Stroll, Nashua NH, 24 November 2012



Ken Charles and Soulshine (Rich Schueller photos)

On the Saturday following Thanksgiving the City of Nashua kicks off the holiday season with its annual Winter Holiday Stroll. Main Street downtown is closed to traffic for the evening and there are events taking place up and down the street.

For the past several years, NHAS has done sidewalk astronomy as one of the "events". Thousands of strollers got to enjoy views of the Moon, Jupiter, and whatever else we could find to show them. My thanks to Ken Charles for doing a super job organizing our participation.

* Paul Winalski

List of attendees at the stroll:

Joe Dechene with a small (6" ?) dob

Joe Derek with his 12" reflector

Gardner Gerry with his C9.25

Ed Ting using a small dob brought by Mike

Mike Townsend with one of his many refractors

Ken Charles with Soulshine

Also offering support was **Rich Schueller** with his hot chocolate and **Ted Blank** who stopped by before it started to bring us the box to put over the street light in the park, giving us a better viewing area, and Smokey Joe, which we decided wasn't needed since we didn't have someone to man it and the weather was suppose to clear.

**Strollers enjoy the view through Joe Derek's 12" dob and mammoth equatorial mount.**

Had some early views of the Moon at 4 PM then the clouds moved in for an hour or so. At 5:30 the clouds started showing some sucker holes and we were able to start showing the Moon again. By 6 PM the clouds had thinned considerably, and we were giving good views of the Moon on all six scopes in use. At around 7:30 I was able to pick up Jupiter over the buildings to the east and slewed my scope to Jupiter for the rest of the evening. Lines at Joe's, Gardner's, Mike's and my scope were five to ten people long most of the evening. Ed and Joe Dechene had small dobs set up showing the moon or Jupiter and still had short lines most of the night. I liked that they had small scopes, as I could point out to people that you didn't need a big expensive scope to have a good time looking at the sky.

**Mike Townsend at the Holiday Stroll.**

The crowd thinned between 9:15 and 9:30, but we still had stragglers stopping by past 10:30 when we had broken down the last of our scopes.

We were packed and out of there by 11 or 11:15. All in all a good night for the fourth year in a row.

We could have used another scope or two, to keep the lines a bit shorter, but the wait wasn't too bad and I didn't see people leaving because of the lines. The night was cold, in the lower 30s (38 degrees at 2 PM) and eight hours outside was a challenge. As to a head count at my scope, I would guess 600 to 700, but could be short a few hundred, it gets hard to keep track after a while

✧ Ken Charles

**Gardner Gerry and a crowd of eager viewers.**

I arrived at 3 PM. Set up, parked my car and was observing the Moon by 4:15. Lines formed at every scope immediately. All of us had 10-20 person lines all night until around 9:30 when the crowds thinned and the city began to put Main Street back to working order. I showed the moon and Jupiter. It was cold and windy next to the canal.

✧ Gardner Gerry

**Ed Ting and scope, set up on Main Street.**

I set up my "shorty" 4 inch Dob on the sidewalk and was busy all night long. The scope is the right height for kids. I took brief breaks, thanks to Rich S, who was willing to sit in for me while I stood up, stretched my legs, etc.

✧ Ed Ting

I showed up with my boy's 6" f/5 homemade dobsonian reflector, the one with the wooden striped 16 sided tube. The scope has a very

low eyepiece height, very easy for small children to access and view.

Some Moon, Pleiades, but the star of the show was Jupiter. While the night offered some glimpses of steady seeing, it was nothing like Nov 22/23 when the sky seemed rock steady (unusual for New England). It was always easy to see belts and moons of Jupiter.

Anxious crowds were eager to see Io emerge from behind Jupiter. We saw a hint of the moon emerge before 8 PM, but it was after 8 PM when it was definitely visible with space between the two worlds. We saw the space increase as the night went on.

Success!

✧ Joe Dechene

Observing Report, Nashua NH, 19 November 2012

An unusually clear night got me out into my in-town back yard with my OA-6.5. I looked at the setting Moon, did some "deep sky" to start with—as deep as you can go when the dimmest visible stars are magnitude 3—and finished spending a lot of time drawing Jupiter when it had cleared the nearby trees. I had the telescope on my equatorial platform, so it could track.

The seeing was very good, the best I've seen since this summer. Stars focused to little balls with flashes of the two outer arcs. The arcs seemed asymmetric, more pronounced on the left side. I think that means the telescope was a little bit out of collimation. More normal star testing (in and out of focus) said it was pretty well collimated.

The detail on the Moon was amazing: scarps on the insides of craters, ripples in maria, shade/color differences in maria, central peaks showing up as multiple crags, the "Dragonfly" of the Messier crater (where there are two "wings" of lighter ray material and one long "tail" forming the dragonfly shape). The Moon went behind a nearby roof-top and I switched to "deep sky".

I looked at M37, M36, M37, M34 and some doubles in Auriga and Perseus. Close pairs split easily. The sky was dark and transparent enough that the clusters showed up in my 9x50 finder but light polluted enough that I could only see the brighter stars in the clusters against a dark grey background. Not a night for galaxies!

After a warm-up break inside, I went out again and looked at Jupiter. Because of the tracking, there are no preceding or trailing side comments, but I think “left” is “preceding”. North was “down”.

The four big moons showed visible discs! CalSKY says they were Europa to the left, Io and Callisto forming a pair to the right and Ganymede twice as far out to the right.

The planet itself showed lots of detail: many bands and zones, with darker areas within the zones and belts. I could see not just the big two bands (North and South Equatorial) but also North and South Temperate and North-North and South-South Temperate. The thin dark line between the N. and S. Equatorial belts was visible—and visibly kinked and knotted in the center of the planet. There were other thin dark lines in the zones. The two big belts showed darker areas to the “right”, with one very dark dot on the N. belt. I thought it might be a shadow transit but CalSKY doesn’t show one.

The seeing was so good that I was able to use a 7 mm eyepiece for 245X and still have a sharp image. I also viewed with 9mm and 12mm UO HD orthoscopies but didn’t use any filters.

✧ John Bishop

Sidewalk Astronomy, Portsmouth NH, 24 November 2012

We had our monthly sidewalk event, with four attendees: myself, **Shane Cross**, **Tom Cocchiario**, and Patrick Amoroso from the NSAAC club. It was cold and windy but the wind died down later and early clouds cleared for a perfect night.

We showed several hundred people Jupiter, the Moon and M42. Laminar air flow above made even my 80mm scope able to pick out five or six cloud bands on Jupiter. It was a very good night.

✧ Ted Blank

Cub Scout Pack 11 Sky Watch, Litchfield NH, 29 November 2012

Herb Bubert, **Gardner Gerry**, **Rich DeMidio**, **Ed Ting**, and **Paul Winalski** brought scopes. Paul did the indoor presentation. We had a small but enthusiastic group of Cub Scouts. The site behind the Middle School building was not very good—horizon lines were blocked by the school to the West and by trees to the East. There were also floodlights on the building that couldn’t be turned off. The sky was rather hazy and lit by the full Moon, so choice of objects to observe was rather limited. I showed 61 Cygni, γ Arietis, the Perseus Double Cluster, and NGC 457.

✧ Paul Winalski

Goffstown High School Sky Watch, Goffstown NH, 3 December 2012

The event took place as scheduled. Skies were steady, but a bit hazy, and dew was a problem. Mike Veilleux and another Goffstown science teacher were there with several of their students (but Mike was disappointed at the student attendance). NHAS attending: **Pat Adams**, **Herb Bubert**, **Gardner Gerry**, **Rich DeMidio**, **Steve Rand**, **Ed Ting**, **Paul Winalski**.

Objects that I showed over the course of the evening: 61 Cygni, Jupiter, NGC 457, M31/32/110, γ Arietis, γ Delphinis, Albireo, WZ Cassiopeiae, Perseus double cluster, M37.

Rich showed us some beautiful views through Obby, including an excellent M27 and a fine O-III filtered view of the Veil Nebula—quite a feat, given the sky conditions.

✧ Paul Winalski

Lincoln-Akerman School Sky Watch, Hampton Falls NH, 11 December 2012

Gardner Gerry and I handled the rescheduled event on the NHAS side. Due to equipment problems we had only one telescope, and with about fifty people the lines were longer than I’d have liked. I manned Mr. T. the 14" TScope and Gardner was handling visual observing.

There were lots of low-lying clouds and background haze at first, and I was afraid the sky would completely cloud over before everyone got to see Jupiter and the four Galilean moons. Fortunately it got clearer as the night progressed, and those who stayed until 8 PM eventually got mostly clear skies. In addition to Jupiter I showed NGC 457, the Perseus Double Cluster, 61 Cygni, the Pleiades, WZ Cassiopeiae, and M42. It was a very successful event, with a well-behaved bunch of kids. This is one of our darker school sites. It would have been magnificent had the skies been completely clear.

✧ Paul Winalski

Daland Library Sky Watch, Mont Vernon NH, 12 December 2012

Steve Rand presented an LTP telescope to the Daland Library in Mont Vernon. I did a brief introduction to telescopes and astronomy and afterwards we went outside to observe Jupiter, the Pleiades, the Double Cluster, and M31 through telescopes. As this was a small library and sky watch, it was not put on the NHAS calendar due to three other events already on the schedule for that week. The patrons were very enthusiastic. Mont Vernon is obviously a tightly knit community and the LTP scope will see lots of use. In honor of the NHAS gift, they have christened the telescope “Orion.”

✧ Ed Ting

Bedford High School Sky Watch, Bedford NH, 13 December 2012

A good crowd of NHAS astronomers (Gardner Gerry, Stu May, Al Navarro, Steve Rand, Ed Ting) and students got to see a transit, and shadow transit, of Europa across Jupiter's disk, and some fine Geminid meteors.

✳ Paul Winalski

I was there, brought my XT8 (including the base!) and showed mostly Jupiter with the nice Europa transit and shadow, and the Pleiades. Conditions were partly cloudy to clear at times, mostly a thin haze that knocked the transparency down. After about 7:45-8:00 it finally cleared up for the night and was very nice. Seeing was pretty steady, and the black dot shadow of Europa was seen by all who observed. Many Geminid meteors made the night more entertaining, I saw at least 35-40 through the evening, and missed others while at the eyepiece.

✳ Gardner Gerry

Salem High School Sky Watch, Salem NH, 13 December 2012

The event took place as scheduled, in the football field behind the school. The venue is reasonably dark, provided you hide the scopes in the shadow of the main grandstand to avoid bright sodium lamps on the school. The football field has the advantage of being more accessible for large scopes (Obby, for example). But I think the library courtyard might have less ambient light (at the expense of being less accessible for large instruments).

We were fighting varying degrees of background haze and clouds the whole evening. I brought Mr. T. the 14" TScope and my TeleVue 85mm refractor. **Rich DeMidio** brought Obby, the 18" Obsession dob. I had the TV85 on the Pleiades all night, as the field of view frames that cluster perfectly.

We started out showing Jupiter. Europa was very close to Jupiter--just about to start a transit. An hour and a half later, I turned my scope on Jupiter again and called the students back to point out that there were FOUR moons before, and now there were only THREE. I think it's really cool that we can observe the orbital motion of Jupiter's Galilean moons hour by hour.

Other objects I showed: 61 Cygni, W Orionis, σ Orionis, Castor, M42 (stunning with a O-III filter), NGC 457, M35, WZ Cassiopeiae, the Perseus double cluster, M31 and M32, M15. During a particularly good period of seeing, I was able to split Rigel, but the view wasn't stable enough to show off to the public—alas, the companion was right on one of the primary's diffraction spikes.

The Geminid meteor shower put on quite a show. I saw ten VERY bright meteors, a score of lesser ones, and I missed a few really bright ones that others at the session were able to enjoy.

I wish there had been less background haze, but all in all this was a very good observing session, and, I think, very instructional for the students who attended.

✳ Paul Winalski

New Bridge Lighting is Astronomer-Friendly

Many of you are aware that the old bridge (built in 1923) that crossed the Piscataqua River from Portsmouth to Kittery was removed this year due its failing structure. A new bridge, paid for by NH, ME and some federal funds, is being constructed now and will be put into place this coming summer. A volunteer group stepped forward and offered to pay to light the bridge. Both **Bob Gillette** and I became involved and working with the NHDOT, the City of Portsmouth and the volunteer committee have been able to change the planned up-lighting of the bridge to LED downlighting.

This is an important real and symbolic advance for the

International Dark Sky Association (IDA) of New Hampshire and important for New Hampshire and Maine skies, and the residents who are wondering where the Milky Way went. Bob, as usual, carried the weight of the work while I was in Papua New Guinea and observing the eclipse in the Coral Sea. The Bridge Committee received a letter of commendation from the IDA for their efforts.

✳ David Speltz

NHAS November 2012 Business Meeting

The November business meeting was held at St. Anselm College on 16 November 2012, our President, **John Bishop**, presiding.

President's Report

The annual Holiday Stroll in Nashua takes place on 24 November, the Saturday after Thanksgiving, along Main Street from 5:00-10:30 PM. Main Street will be closed from 4:30 PM, so arrive before then to drop off equipment. We will be in the small park along the Nashua River at the north end of Main Street. **Ken Charles** is our contact person. There is limited setup space in the park, so ask Ken first before bringing a scope. Expect thousands of viewers!

Election of officers for 2013: Here is the process: Nominations will take place at the November and December meetings. Any member may nominate someone (including themselves). Nominations require a second (and of course assent from the nominee) to become official. Voting will take place at the December meeting, and the new officers take over immediately after the vote. Term limits mean that the current President and Vice President can't run again for their respective offices. Open for election are the offices of President, Vice President, Secretary, Treasurer, and a Director (who will serve a three-year term).

The floor was then opened for nominations, and these nominations were made, seconded, and accepted:

Rich DeMidio for President
Tom Cocchiaro for Vice President
David Gilmore for Treasurer
Ken Charles for Director

Board of Directors

Gardner Gerry reports that loaner scopes are available. The Board is putting together a list in the Forums on our website. **Steve Rand** has one of the laptops to help out with public observing. **Joe Derek** will not be doing any repairs at YFOS this year; plans are being made for 2013.

Educational Outreach

Rich Schueller reports that **Peter Smith** is taking over management of the Library Telescope Program. There was discussion of setting up a NHAS mailing list for non-members. Who has the controls? The EOC is considering ideas for a series of members-only events:

- local sky watch/scope clinics
- mentoring young members
- young members-only events
- tours to Haystack, UNH Observatory, Oak Ridge in Harvard MA
- an Intro to Astronomy event: every question allowed
- solar observing sky watches

LTP update: We still have some scopes to place.

More EOC members would be helpful and very welcome!

Public Observing

Paul Winalski reports that we had several successful sky watches. The big events for the holiday season are the Nashua Holiday Stroll and First Night in Portsmouth on New Year's Eve.

Steve Rand has volunteered to help out as a lecturer at sky watches. Volunteers to act either as event coordinators or as Designated Astronomers are welcome.

Membership

Bill Steele was not present. He is always on the lookout for ideas for presentations or for requests for presentations.

Astrophotography

As always, check out the new images in the Pictures forum.

Treasurer's Report

Ken Charles received a \$205 donation from the Nashua Public Library teen center participants. The donation letter reads:

"On behalf of the Nashua Public Library teen summer reading program participants I would like to take this opportunity to donate \$205 to the New Hampshire Astronomical Society. Each year a portion of the teen summer reading program is dedicated to reading for a good cause. Each book a teen reads earns \$.25 for charity. Two hundred eighty seven Nashua teens read 820 books over the course of the 2012 summer. The theme for this year's reading program was 'Own the Night', so it seemed only fitting that your organization was selected to benefit from this initiative.

*Sincerely,
 Jenn Hosking
 Supervisor, Teen Services
 Nashua Public Library"*

Miscellaneous Business

Several speakers have been lined up for 2013 but we don't have all twelve yet. Help us find other speakers!

We need a Scope/Book of the Month for every month of 2013.

Scope of the Month

Joel Harris won a TeleVue eyepiece collection at Stellafane: 21mm Ethos, 4.7mm Ethos, 1¼" nebula and O-III filters. He also showed a lightweight Crayford focuser that he machined at work.

Ted Blank showed a specialized suitcase-portable, airline-portable 10" reflector specialized for video recording. IOTA uses these for recording asteroid occultations.

Rocks of the Month

Bob Veilleux showed iron meteorite fragments from Gamil in Egypt that are pieces of the asteroid Vesta. 16 Kg was pulled from a meteor crater discovered on Google Earth.

Evening Presentation

Cynthia Randall, Executive Director of Cornerstones of Science, gave a

presentation on the Library Telescope Program in Maine.

The Bottom Line

Starting Balance:	\$11095.60
Deposits/Credits:	
Membership:	1320.00
Donations:	456.05
Bank interest:	0.50
Calendar sales:	161.00
Total :	1937.55
Accounts/Paid:	
Rackspace Cloud:	21.84
United Site Services (porta-potty):	56.38
Rhymes Propane:	67.23
Total:	145.45
Net Account Balance:	\$12887.70
Petty cash drawer:	\$100.00
Cash Balance:	\$12987.70

EOC Share: **6008.62**

Membership: 87

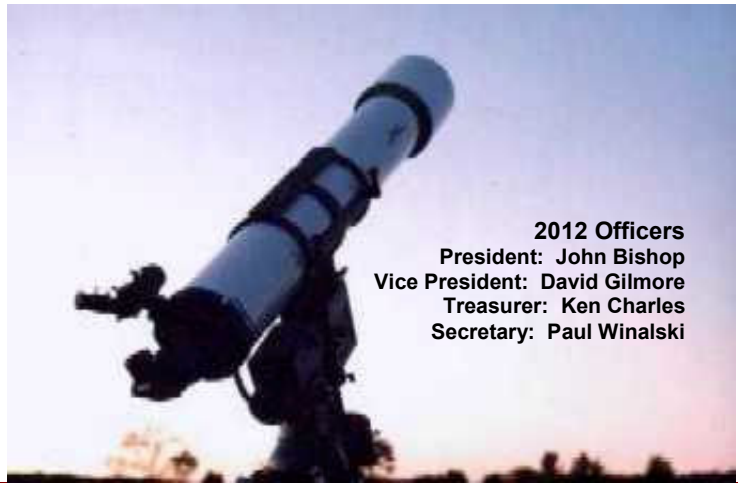
New Members:

Stan Popielarz, Bedford NH
Jeanne Popielarz, Bedford NH
Christian Wilke, Bow NH
Jeremy Grimaldi, Salem NH

Donations:

Tim Sagar	30.00
Nashua Public Library	205.00
Marc Stowbridge	6.05 LTP
Peter Smith	100.00
Rich DeMidio & Jean Buckley	50.00 YFOS
Kenneth McKenzie	15.00 YFOS
Jonathan Blodgett	10.00 YFOS
Christian Wilke	10.00 LTP
Harris Center for Conservation Education	30.00

* Ken Charles
 NHAS Treasurer 2012



2012 Officers
 President: John Bishop
 Vice President: David Gilmore
 Treasurer: Ken Charles
 Secretary: Paul Winalski

DEADLINE December 2012 Issue: 5 December 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:

Ken Charles, Gardner Gerry, Ed Ting, Joe Dechene, John Bishop, Ted Blank, David Speltz

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



NHAS Upcoming Events

Event	Date	Time	Location
Rey Center Sky Watch	December 15	6:30 PM	Curious George Cottage, Waterville Valley NH
Amherst Public Library Sky Watch	December 19	6:30 PM	Amherst Public Library, Amherst NH
Coffee House Night	December 21	5:00 PM	YFOS
Sidewalk Astronomy	December 22	6:00 PM	Market Square, Portsmouth NH
Portsmouth First Night	December 31	4:00 PM	Market Square, Portsmouth NH
Goffstown High School Sky Watch	January 3	6:00 PM	Goffstown High School, Goffstown NH
Discovery Center Sky Watch	January 4	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Boy Scout Troop 459 Sky Watch	January 9	7:00 PM	Lee NH location TBD
Salem High School Sky Watch	January 10	7:00 PM	44 Geremonty Drive, Salem NH
Coffee House Night	January 11	5:00 PM	YFOS
Rey Center Sky Watch	January 12	6:00 PM	Curious George Cottage, Waterville Valley NH
Franklin Middle School Sky Watch	January 15	6:00 PM	200 Sanborn Street, Franklin NH
Educational Outreach Committee Meeting	January 17	6:30 PM	Manchester City Library, Manchester NH