



## Frozen Buns Reported at YFOS



NHAS members at YFOS "Freeze Your Buns" Night, from left to right: Joe Derek, Larry Lopez, Nils Wygant, Herb Bubert, Dennis Miller, Chase McNiss, Rich DeMidio, Gardner Gerry (photo by Gardner Gerry)

### President's Message

Here it comes, my favorite event of the year, Messier Marathon! Larry and Linda Lopez have once again offered to host the Marathon at their home on the mountain in New Boston, to be held on March 16th, with a rain date of the 17th. Let's hope we get good weather! Ed Ting will be giving his how-to Marathon presentation at the February Business meeting as we have moved the March meeting to the 23rd. Can't find your way through the Virgo Galaxy cluster? Ed will show you how to do it easily.

☺ Gardner Gerry

NHAS President 2007

### Highlights for this Month

Friday 9 February was our annual "Freeze Your Buns" Coffee House Night at YFOS. The weather cooperated both with reasonably clear skies and a suitably cold temperature. The Merrimack local edition of the *Union Leader* newspaper did a story on local astronomers. Two NHAS members were interviewed.

As Gardner mentioned, next month is the **Messier Marathon**. Be sure to attend Ed Ting's presentation at the February business meeting if you can.

This spring, NHAS will be holding a series of **Astro 101** courses on the fundamentals of observing. If you're new to the hobby, this is a great way to learn. If you're a veteran, this is a chance to brush up your knowledge, or to explore new aspects of the hobby.

A **total lunar eclipse** will be visible from New England on 3 March. With any luck the skies will cooperate.

There is a new **Resource Database** section on our website. Check it out, and add your own entry!

☺ Paul Winalski  
NHAS Secretary 2007

## Freeze Your Buns!

I was using the YFOS clock on the home page to the website. It showed clear skies with below average transparency. You could definitely notice the transparency, mainly that the Milky Way was not as pronounced as it typically is from YFOS. Nonetheless, it stayed clear and we had a wonderful time. About 15 people total showed up including guests of some members.

I got the Horsehead with Obby and saw E and F in the Trapezium with the 17 and 9 mm eyepieces. Chase showed me where the California Nebula was while I had the H-Beta filter on. Practiced several messier objects as well and a few NGCs that folks asked me to find for them.

I was surprised how good the viewing still was even in low transparency.

Hoping to get another crack at the Horsehead with better transparent skies.

Saturn was bright but I could not make out the Cassini division because of the seeing conditions.

My new clothing worked great - mainly my new LL Bean Baxter State Park Parka. I never even came close to being cold. Temperature was 8 degrees when I left around midnight. Guessing it was in the teens most of the night. Did not have to use dew heaters either.

∞, Rich DeMidio

## NHAS in the Newspaper

Jim Kozubek, the Merrimack town reporter for the Manchester *Union Leader*, interviewed a couple of NHAS members, **Paul Winalski** and **Steve DiPirro**, for an article on amateur astronomers living in Merrimack. The article was published in the Friday, 2 February Merrimack Edition of the *Union Leader*. NHAS and our activities got a good plug.

I spent about two hours talking stars with Jim. We jumped around a whole bunch of topics, ranging from how I got started in astronomy, to the types of telescopes and selecting a good beginner's scope, NHAS and its activities, finding your way around the sky, stellar evolution, and Doppler red shift and the expanding universe. I thought he did an excellent job of boiling it all down into something that

would fit the space allowed and make a good read.

When we were done talking it was dark outside, so I set up the TeleVue 85mm and 14" TScope and showed him Venus, the Moon, M42, M31/32, the Pleiades, NGC 457, and the Perseus Double Cluster. He took a few pictures of me at the scope, one of which came out and was included in the final article.

∞, Paul Winalski

## Messier Marathon

Our annual Messier Marathon observing event will take place in New Boston, at **Larry and Linda Lopez's** home, on Friday 16 March, with Saturday 17 March as the rain date.

The event runs from 4:00 PM until the next dawn, and the idea is to see if you can observe all 110 objects in the Messier catalogue in a single evening (something that is only possible in early Spring at our latitude).

At the February club Business Meeting, **Ed Ting** will give a presentation on how to "run the Messier Marathon".

Ed has good advice for MM beginners and veterans alike.

∞, Paul Winalski

## Astro 101

The call went out, many Senior Members stepped up and we have Astro 101 course material into the summer.

The schedule for the next three months is:

March 9th NHAS Coffee House at YFOS: 7:00PM, clear or cloudy, "**Telescopes and Optics**" presented by **Alan Shirey**,

Course Outline:

- Types of telescopes, advantages of each
- Focal length and focal ratio
- Eyepiece types, advantages of each
- magnification and apparent field of view
- Finders
- Filters

April 20th prior to NHAS Business Meeting at CMP: CMP Dome at 6:00PM "**Navigating the Night Sky**" presented by **Paul Winalski**.

This class is open to invited guests. Special effects provided by **Dave McDonald** using the CMP Planetarium.

Course Outline:

- Coordinate systems- ALL of them, and their application
- Motions of the sky
- Constellations
- Major celestial signposts and star-hopping
- Solar System objects and their motion

May 25th Grainger Observatory at Phillips Exeter Academy: 7:30PM "**Intro to Photography**" presented by **John Blackwell**

**Pre-Registration is required.**

**Due to facilities, this presentation is limited to the first 20 people who sign up.**

Driving Directions:

[http://www.exeter.edu/about\\_us/about\\_us\\_2161.aspx#From\\_Manchester\\_Airport\\_Manchester\\_NH\\_40\\_minutes](http://www.exeter.edu/about_us/about_us_2161.aspx#From_Manchester_Airport_Manchester_NH_40_minutes)

Course Outline:

- The basics of cameras and telescopes
- Focal lengths
- Methods of attachment: prime, afocal, eyepiece projection
- Wide field work
- Guided vs. unguided
- Focus
- Digital and film methods
- Resources

∞, Alan Shirey

## Astronomical Clock in Ulm

**John Bishop** recently was on a business trip to Ulm, Germany. In the tower of the town hall (Rathaus) building is a most ornate and unusual astronomical clock:



John reports that the clock shows:

- hour and minute
- Moon in zodiac, with the phase indicated by a black cover which rotates over a sphere (at 7:00 in the picture)
- Sun in zodiac (at 12:00 in picture)
- Time of sunrise and sunset (innermost light and dark blue circle)
- And more besides

John remarked, “we need one of these!”

∴ Paul Winalski

## Total Lunar Eclipse 3 March

On the evening of 3 March 2007 there will be a total eclipse of the Moon. For us New Englanders, totality will begin at sunset—22:44 UT (5:44 PM EST)—with mid-eclipse at 6:21 PM EST.

Totality ends at 6:58 PM, the partial eclipse ends at 8:12 PM, and the penumbra will last be visible near 8:50 PM. See the March issue of *Sky and Telescope* for more info.

∴ Paul Winalski

## Resource Database on Website

**Matt Marulla** has created a new area in the NHAS Website. I encourage everyone to visit the new Resource Database and offer to share your special skill set with other NHAS members in pursuit of their astronomy interests. It could be as simple as offering to observe with a new member, or help them to use their new telescope.

∴ Alan Shirey

## Sky Watch for Manchester Hillside Middle School, 16 February

Good evening, Mr. Phelps:

Your mission, should you decide to accept it ... is to assist the Manchester Hillside Middle School 7th grade Earth Science class in learning about the night sky. The meeting in question will occur at the Massabasic Audubon Center on the night of February 16 (unless enemy action requires the use of the cloud date of Feb.23rd). Your contact will be Baron Richardson, who is using the cover of a 7th grade teacher. The opposition will likely consist of 50 students and their parents.

There is a possibility of additional outside agitators, taking the form of siblings. The Secretary is hoping that you and your team of astronomically minded folks will help the local population resist the lures of hearth and home, and particularly video games, and help them gain an appreciation of the Dark Side.

Of course, if you or any of your team is cold or enraptured, the Secretary will disavow any knowledge of your activities (even though he will likely be at the meeting and not even know you went...).

I plan on going to the sky watch.

∴ Marc Stowbridge

## NHAS Jan 2007 Business Meeting

### ATM

**Larry Lopez** described the use of automatically resetting circuit breakers for preventing frying the electronics on a scope.

### YFOS

**Larry Lopez** performed extensive ice chipping. He brought some sand to the site and replaced the (empty) propane tank for the main heater in the warming hut. Which explains why several of us couldn't get the pilot to light up.

### Membership

A big welcome to new members Bill Cantwell, Timothy Gurshin Jr., Richard Tessier.

Work is underway to set up a series of Astro 101 and 201 observing courses.

### Public Observing

**Paul Winalski** and **Mike**

**O'Shaughnessy** conducted a presentation for Westford MA Cub Scout Pack 95 at their overnight in Rindge, NH. It unfortunately had to be an indoor presentation rather than a sky watch as the weather did not cooperate.

**Marc Stowbridge** passed around the NHAS information cards that he had made up. **Matt Marulla** agreed to see about getting them formatted and printed in volume for use by club members. Marc also had a star party etiquette handout that he proposes we send out to those requesting a sky watch, along with the questionnaire and

information about NHAS. This should also go onto the website.

Marc is talking with a science teacher at Moultonborough Academy who holds sky watches periodically. It is likely we will connect up with them in the future.

### Web Administration

The website has been updated with information on the new officers for 2007. The updated inventory for Club assets can go online as soon as the Board of Directors completes its inventory survey.

### Photography

No organized activity to report. Members continue to post astounding photos on the website.

### Radio Astronomy

Activity continues to focus on the “listening to meteors” project. We missed the November and December meteor showers. The receiving antenna for the telescope has been built. Nothing new on the computer interface as yet. There is the possibility of using a 4-channel sound card.

### Other Business

There seems to be no need for the laminated membership cards currently mandated by the by-laws. They are expensive to produce. A motion will be tabled at a future Business Meeting to strike the clauses in the Club by-laws that mandate their annual production.

The Board of Directors is conducting an inventory of all club assets. This will go up on the website when completed.

### Scope of the Month

William Optics Megrez 90mm (620mm focal length) refractor; comes with case. This is a fine fluorite doublet apochromat with a dual speed focuser. The scope is impressively well machined and put together. Mounted on a Meade LXD, it will be used both for visual observing and photography. It is not clear if this scope has enough in-travel for use with a bino viewer.

### Book of the Month

[Time Traveller](#), the autobiography of Ronald Mallett, a physicist at the University of Connecticut who has figured out a way to build a time



machine using gravitational theory and lasers.

### Evening Program

**Matt Marulla** displayed some of the beautiful and unusual minerals that he collected while on his Grand Canyon trip this past summer.

**Gardner Gerry** presented some photos from the Mars Observer, which has found the 1977 Pathfinder mission's landing site.

The bulk of the evening's program was a **magnificent slide show of images taken by NHAS members**, many of whom were in attendance and explained how the images had been taken and processed. Your secretary apologizes in advance for any unintentional omissions; he pleads being overwhelmed by the beauty of it all. Many of these images can be seen in the "Pictures!" section of the members-only area of the website. Posting of images there is highly encouraged.

**Chase McNiss** showed a breathtaking sequence of high-resolution lunar images.

**Rich Schueller** showed a webcam image of the Jupiter system; Saturn; a composite of three planets (Mars, Jupiter, Saturn); the North America Nebula shot in H-alpha and a TeleVue; M51 taken with a C-14 reflector; M31/32/110 with a TeleVue and ST10; a Veil Nebula composite with 8 minute exposures in H-alpha; comet Schwassmann-Wachmann passing the M57 Ring Nebula.

**John Buonomo** showed fine images of M16, M45, M38, M36, M37, (and at this point your secretary lost count). Particularly excellent were views of the California Nebula, M42, and M81.

**John Blackwell** showed a magnificent view of the North America Nebula taken with a SBIG 6303, and a fine film image (anybody remember film? ☺) of the California Nebula. Also the M86 galaxy cluster, the Sombrero (M104), M88 with supernova 1999cl, and M101.

**Nils Wygant** showed images of M13, M26, comet Maccholz, the California Nebula, and the umbra of the lunar eclipse on the night that the Red Sox won the World Series. Also a fine solar image showing sunspots.

From **Gardner Gerry** we had film images of Mars and the Pleiades; the Summer Triangle and the Milky Way; the constellation Lyra; comet Maccholz in Cepheus; M33; and a crescent Moon with earthshine.

**Tim Printy** showed comets SWAN and McNaught; Milky Way star clouds and an all-sky shot; and the Milky Way with an Iridium flare (taken at YFOS); and a fascinating video recording of the Geminid and Perseid meteor showers.

From **Herb Bubert** we saw M97 and M108; M22; NGC 2359 (Thor's Helmet); M20, NGC 2024 and the Horsehead; M31/M32/M110; Mars; Saturn; and a sequence of images of a double shadow transit (with Red Spot as well) that forms a whimsical "face on Jupiter".

### The Bottom Line

|                             |                  |
|-----------------------------|------------------|
| <b>Starting Balance:</b>    | <b>\$4774.16</b> |
| <b>Deposits/Credits:</b>    |                  |
| Membership:                 | \$90.00          |
| Donation:                   | \$50.00          |
| <b>Accounts/Paid:</b>       | <b>\$152.67</b>  |
| (Peerless, PO Box)          |                  |
| <b>Net Account Balance:</b> | <b>\$4761.49</b> |
| <b>Petty cash drawer:</b>   | <b>\$195.75</b>  |
| <b>Cash Balance:</b>        | <b>\$4957.24</b> |

**2007 Membership:** 115

### New members:

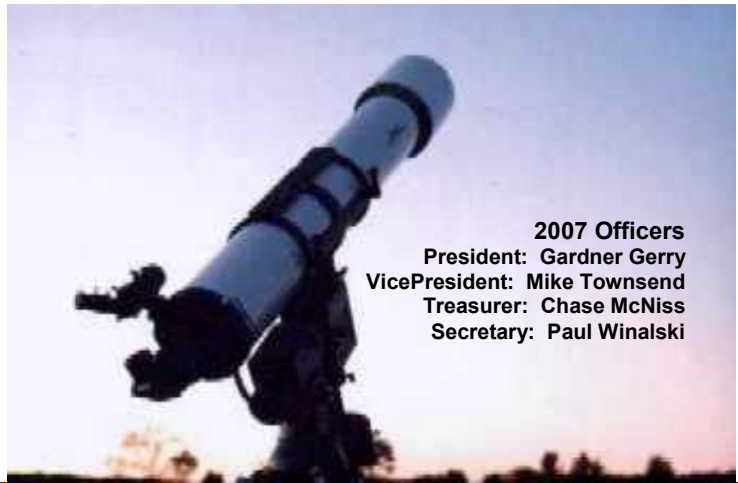
Bill Cantwell, Merrimack, NH  
Timothy Gurshin, Jr., Canterbury, NH  
Richard Tessier, Dummer, NH

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☺ Chase McNiss



**2007 Officers**  
 President: Gardner Gerry  
 VicePresident: Mike Townsend  
 Treasurer: Chase McNiss  
 Secretary: Paul Winalski

**DEADLINE March 2007 Issue: 5 PM Mar 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)

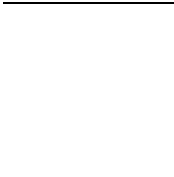
**Use our web site:**

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

**This month's contributors:**

Gardner Gerry, Rich DeMidio, Alan Shirey, John Bishop, Marc Stowbridge, Larry Lopez, Bob Sletten, Matt Marulla, Chase McNiss, Rich Schueller, John Bounomo, John Blackwell, Nils Wygant, Tim Printy, Herb Bubert, Paul Winalski

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



**NHAS Upcoming Events**

| <b>Event</b>                                | <b>Date</b>                  | <b>Time</b> | <b>Location</b>                            |
|---|------------------------------|-------------|--|
| Feb Business Meeting                        | Feb 16                       | 7:30 pm     | Christa McAuliffe Planetarium, Concord, NH |
| Manchester Hillside Middle School Sky Watch | Feb 16                       | dusk        | Massabesic Audobon Center, Manchester, NH  |
| CMP Sky Watch                               | Mar 2                        | 7:00 pm     | Christa McAuliffe Planetarium, Concord, NH |
| Coffee House Night                          | Mar 9                        | 5:00 pm     | YFOS                                       |
| Astro 101: Telescopes and Optics            | Mar 9                        | 7:00 pm     | YFOS                                       |
| Messier Marathon                            | Mar 16<br>Mar 17 (rain date) | 4:00 pm     | Lopez residence, New Boston, NH            |
| Mar Business Meeting                        | Mar 23                       | 7:30 pm     | St. Anselm College                         |

