



President's Message

The seasons are a changin' and that means we'll need our cold weather gear out really soon, like last night or actually this morning, at YFOS where the temperature was 41° F when I left at 3:30 am. If you are new to the club or just want to refresh your memory see **Chase McNiss'** article "Dressing for Cold Weather Observing" in the "Articles and Learning Resources" (http://www.nhastro.com/article_coldweather.php) section of our NHAS website home page. And don't forget about your equipment—it's getting cold along with you and wet as well. I always have a supply of cheap shop towels on hand to wipe the dew off everything before it gets packed away for the hour ride home from YFOS. Take care of yourself and your equipment and you will be observing comfortably with top shape equipment for many years to come.

★ Gardner Gerry
NHAS President 2007

Highlights for this Month

We've been blessed with some excellent observing weather lately. I have posted a trio of observing reports in the Member's Forum on the NHAS website.

Now that Fall is here, we resume the Astro 101 series of talks on observing fundamentals. Also coming up is the first of the Astro 201 advanced topic sessions.

The 2008 membership year starts on October 1, when the \$15 membership renewal dues become payable.

Be sure to check out **Tim Printy's** article on the return of Comet Tuttle this coming winter.

★ Paul Winalski
NHAS Secretary 2007

Fall Messier Marathon

We (NHAS) went up to the Great Northern Moose Lodge in Dummer, NH last year and the weather didn't cooperate.

This year at the spring Messier Marathon in New Boston, the weather didn't cooperate.

So I've been thinking of a fall Messier Marathon in Dummer.

I've made reservations for Linda and me at Great Northern Moose Lodge for the weekend of October 12, 2007. It is a couple of days after new moon and it's really dark there.

If we have bad weather for astronomy there is usually something to do: hiking, looking for moose, birding, ... We went looking at wild flowers, and went to a Pow Wow last time Linda and I were there, but that was in June.

Kindly make reservations directly.

Think of it as a 2 day vacation.

I'm not sure how the weather will be in Mid October. Could be almost anything. Not sure when leaf season peaks.

So make your reservations directly and if you want tell me you are going do so. Surprising me by not telling me you are going would be fine too.

I like surprises. Well, at least some surprises.

The owner/operator is Richard Tessier, Dummer NH, who is also a member of NHAS. The Great Northern Moose Lodge web page is <http://www.greatnorthernmoose.com>, and you can contact Richard from there.

★ Larry Lopez

Membership and Astro 101

No additional members since last meeting.

Astro 101 Sessions currently scheduled (also posted on Resources page and

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

in the Calendar on the website):

- On September 21st, **Chase McNiss** will present Lunar Observing at the NHAS Business Meeting, 7:30PM at St Anselm. On September 22nd at 7:30PM Chase will complete his course by hosting a Lunar observing session at YFOS.
- On October 20th at 1:00PM, **Rich DeMidio** will present Solar Observing at YFOS. If skies permit, the presentation will be followed by actual solar observing. Registration (by email) is appreciated as it will help with handout counts.
- On November the 9th, at 7:00PM, **Paul Winalski** will present Deep Sky Observing at YFOS. The presentation will be given regardless of sky conditions. If sky conditions permit we will observe afterwards. Registration (by email) is appreciated as it will help with handouts.

Our first Astro 201 course is scheduled for 7:00PM, November 2nd at Exeter Academy. The topic is Photometry, presented by **John Blackwell**. This will involve math, there is a limit of 14 people, (there are currently 9 seats available). Registration is required by email to Alan Shirey, which can be done using the "Email Membership Chair" link on the "Contacts" page at the NHAS website.

Additional Astro 201 ideas would be appreciated. Please let me know.

FYI: Winter Star Party invitations have been mailed. This is a fine event held in the Florida Keys. It has presentations, and its warm, it has very good southern horizons, and its warm, it has neat equipment to ogle at and observe through, and its warm. Its also a nice chance to escape 0°F observing temps of February in New England. If you are thinking of attending please contact the registrars at the Southern

Cross Website to register prior to the end of September. (it books quickly)

★ Alan Shirey

Astro Photons

There has not been a meeting of the AP committee lately, so if there is demand for one (e-mail Gardner at the Astrophotography Chair's address on the "Contacts" page of the website) we will put one on the schedule. The usual suspects and a few new ones continue to show new work in the forums on the club's website. Please go check out the Pictures forum to see what's happening.

★ Gardner Gerry

Radio Astronomy

The Leonid meteor shower is coming up on November 18th. Last year we made a meager recording of possible radio signals emanating from the energetic atmospheric impacts. The low frequency antenna used in last years attempt still exists. Possibly we could try again this year.

We also had talked about visual recording to confirm the RF reception as well as potential audio work. If there is any interest in working all or parts of this activity again for this November please indicate so.

Success on this is a "long shot" but trying might be fun and educational. It is a very low cost radio astronomy thing to try as a group.

★ Bob Sletten

Public Observing

On 31 August we held a sky watch at the Tamworth Learning Circle School for the Unitarian Universalist Fellowship of the Eastern Slopes. Only a few people showed up, but one of them was 99 years old(!) and delighted to see Jupiter and his moons through the telescopes.

The scheduled sky watch for the Law Partners Retreat at the Mt. Washington Hotel was rained out on its scheduled day of 14 September. **Marc Stowbridge, Mike O'Shaughnessy,** and I showed up on the rain date of 15 September because the Clear Sky Clock indicated the possibility of some clearing, but, alas, it was not to be. But we did set up a couple of scopes just for show-and-tell, and a long conversation

on astronomy with a lawyer from Cambridge resulted. He vacations in New Hampshire and indicated he might end up joining NHAS.

With the start of Fall the public observing scene livens up.

Upcoming events (check the Club Calendar for details such as time and directions):

On Saturday, 6 September we will hold a sky watch at the Great Bay Discovery Center in Greenland, NH.

Wednesday 10 October is our annual sky watch at Rundlett. Expected attendance is about 150.

Thursday 18 October will be a sky watch at the Auburn Village School in Auburn, NH with expected attendance of 95.

★ Paul Winalski

Comet Tuttle Returns

Last year's apparition of comet Schwassman-Wachmann 3 was sort of a bust for New England. We did get to see the comet when it was fairly bright in April. However, when the comet's brightest fragment was putting on its best show, the moon interfered and we also had poor weather. This was especially the case for when the comet passed near M57. I did not even try that evening simply because the sky was so bad. However, this Christmas, we get another chance.

Comets tend to behave erratically when they are just discovered. However, the periodic comets tend to be "old reliables" because their performance has been recorded over the years. This winter, Comet Tuttle (8/P) makes an especially close pass to Earth's orbit (0.25 AU on 12/31/07), which means the comet will be brighter than it usually is. This year it will peak around magnitude 5.7 at the beginning of the New Year. What is more impressive is that the comet will be best in the evening sky, far away from the sun (elongation of roughly 100 degrees) and the moon will be past full and not rising until 11PM. Conditions are good for the best part of the comet's apparition.

Comets are best when they break the 10th magnitude barrier and Comet Tuttle is expected to do this at the end of November. The comet will then be

transitioning from Ursa Major to Cepheus. The comet moves at a pretty good clip for the next month. When it reaches +7 on the 21st of December, the comet is in Cassiopeia. However, the best part of the show starts just before the New Year.

On December 30/31, the comet will pass in front of/very near the Galaxy M33 in Triangulum. This will be an excellent photographic opportunity. The comet's angular rate is about 9-10 seconds of arc per minute. This means the longer focal length lenses required to image the galaxy in detail (400mm and greater) will record the comet's motion after about a minute. I expect something very similar to SW3's close pass to M57 will be produced using software. Will any of our photographers be able to produce such an image? I know I am going to try.

After this, the comet moves at a rapid clip to the south. We won't see much by the end of January. It will be worth it to mark your calendars for this one. The pass of the comet next to M33 will be the highlight but it definitely will be a worthwhile endeavor to follow the comet this winter.

★ Tim Printy

October's Guest Speaker

Author and Theoretical Physicist Dr. Ronald Mallett will be the featured speaker at October's Business Meeting

Almost every textbook or TV special on astronomy makes a point of relating what we see in the night sky as ancient history—that is, the stars, nebulae and galaxies we think we are observing are actually mere reflections of these objects as they were thousands, millions—and even billions of years ago. In other words, looking at the heavens on those clear nights is like looking back in time. What would it be like if you could go beyond just observing reflections of the past and actually travel there?

Well, it wasn't too long ago time travel was the stuff of H.G. Wells and the world of fiction. Not any more if a University of Connecticut theoretical physicist has anything to do with it. And he'll be on hand as the guest speaker at the NHAS Oct. 19 Business Meeting to share his research and ideas about how to build a machine that will

make it possible for travelers to move back in time.

After the loss of his father to illness in the prime of life, a young Ron Mallet came across H.G. Wells' book "The Time Machine" which set the course for the rest of his life. If he could find a way to build a time machine, he thought, he could go back in time and change the circumstances that resulted in his father's death. Drawing strength from that hope, he entered the field of theoretical physics using Einstein's groundbreaking work as a foundation. In his new book, [Time Traveler: A Scientist's Personal Mission to Make Time Travel a Reality](#) (rated 4 ½ stars on Amazon.com), Dr. Mallett, one of the first African-American Ph.D.s to specialize in theoretical physics, describes the 30-year emotional and intellectual journey that led him to one of the most incredible possibilities in the history of mankind.

Dr. Mallett's presentation will feature a 45-minute BBC special on his research and plans for a prototype time machine, a discussion about recent Gravity Probe B Project and its confirmation of Einstein's Theory of Relativity, a question and answer period, and a book signing.

Space in the dome at the Christa McAuliffe Planetarium is limited to 103 seats, so those members interested in attending the presentation should contact Tom Cocchiario at (603) 436-7354 or tomcocchiario@comcast.net to reserve a seat. Admission is free, however, due to the expected high level of interest in the program, it is necessary to sign up in advance to ensure a seat. The regular monthly NHAS business meeting will follow the presentation. Stay tuned to the NHAS online calendar as a starting time for the presentation has not yet been determined.

For more on Dr. Mallett, his book, or his research, visit www.amazon.com or www.physics.uconn.edu/~mallett/main/main.htm.

★ Tom Cocchiario

NHAS August 2007 Business Meeting

ATM

Chase McNiss and Joe Derek are doing a dob conversion. Some other scopes are possibly in progress.

YFOS

Larry Lopez reports that the YFOS lawn needs mowing, and that we need lawn mowing volunteers. The Mosquito Magnet doesn't work (intermittent restarting problem), and Larry has given up trying to fix it.

Membership

No report.

Public Observing

Inquiries from schools are picking up. We have upcoming events at the Tamworth Learning Circle School and at the Mt. Washington Hotel in Breton Woods.

The 2nd Madison Old Home Week sky watch was held; a good time was had by all.

Web Administration

No report.

Photography

Gardner Gerry reported that no meeting has been held recently. Members continue to post great images on the website.

Radio Astronomy

Bob Sletten gave a brief talk on pulsars—fast-rotating supernova remnants that were discovered by radio telescopes. We could possibly listen to pulsars, but the signal is very weak. The smallest object in space was observed by radio, looking at a pulsar. It was a 16" diameter spot on the pulsar.

Books of the Month

Ken Charles brought [Great Astronomers](#) by Sir Robert Ball, published in 1906 or 1907.

Scope of the Month

Chase McNiss brought his 8" Schmidt-Cassegrain, which

originally came on a NexStar mount (1-arm alt/az). Chase has re-mounted it on a German equatorial mount, which is nice for tracking purposes at public sky watches.

The second Scope of the Month was a 80mm refractor with a rotating Crayford focuser and a wooden mount adapter. Stellafane was this scope's first light.

Miscellaneous Business

Reports from Stellafane (see last month's *Observer*).

Evening Program

Dr. Robyn Millan, "From the Sun to the Earth: Space Weather and the Environment".

★ Paul Winalski

The Bottom Line

| | |
|-----------------------------|------------------|
| Starting Balance: | \$4407.78 |
| Deposits/Credits: | 7.50 |
| (Membership) | |
| Accounts/Paid: | -46.67 |
| (Peerless) | |
| Net Account Balance: | \$4468.51 |
| Petty cash drawer: | \$200.00 |
| Cash Balance: | \$4668.51 |

2007 Membership: 148

New members:

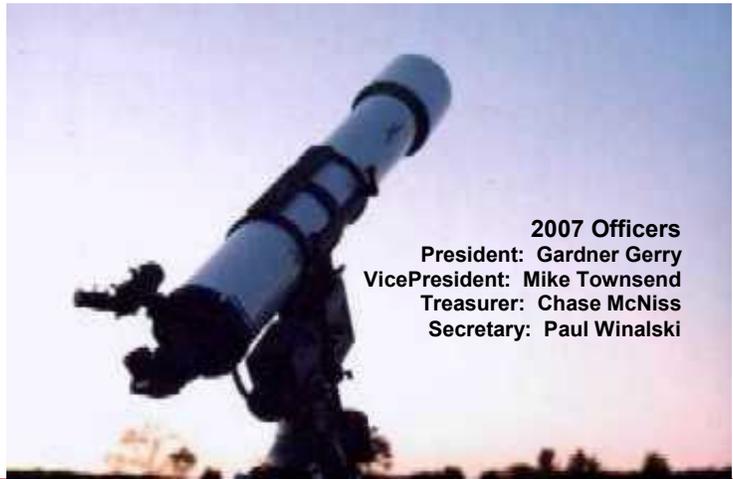
Gary Miller, Pleasantville, NY

★ Chase McNiss

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DEADLINE October 2007 Issue: 5 PM October 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:

Gardner Gerry, Larry Lopez, Alan Shirey, Bob Sletten, Tim Printy, Tom Cocchiaro, Chase McNiss, Paul Winalski

New Hampshire Astronomical Society
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NHAS Upcoming Events

| Event | Date | Time | Location |
|---------------------------------|--------|---------|--|
| CMP Public Sky Watch | Oct 5 | 7:00 PM | Christa McAuliffe Planetarium |
| Great Bay Sky Watch | Oct 6 | 6:30 PM | Great Bay Discovery Center, Greenland NH |
| Rundlett Sky Watch | Oct 10 | 6:30 PM | Rundlett Middle School, Concord NH |
| Coffee House Night | Oct 12 | 5:00 PM | YFOS |
| Auburn Village School Sky Watch | Oct 18 | 7:00 PM | Auburn Village School, Auburn NH |
| October Business Meeting | Oct 19 | 7:30 PM | Christa McAuliffe Planetarium |
| Astro 101: Solar Observing | Oct 20 | 1:00 PM | YFOS |
| CMP Public Sky Watch | Nov 2 | 7:00 PM | Christa McAuliffe Planetarium |
| Astro 201: Photometry | Nov 2 | 7:00 PM | Phillips-Exeter Academy |
| Coffee House Night | Nov 9 | 5:00 PM | YFOS |
| Astro 101: Deep Sky Observing | Nov 9 | 7:00 PM | YFOS |