



Clear Sky Virus

President's Message

I took my mount out of its travel cases and set it up in my living room. I wanted to tune up a couple things and then take it outside on a clear night to calibrate the auto-guider. That was almost two months ago. Still it sits in my living room, waiting for that clear night. If this keeps up we may not be able to do astronomy, but at least we'll have a very nice local rainforest to explore.

Next week is our first, and hopefully annual, trip up to the dark skies of Dummer, NH for a little star party.



Great Northern Moose Lodge

With family members included, it looks like about 20 of us are going and the extended forecast is clear, but with afternoon thunderstorms possible. Are your fingers crossed?

Finally, we have a real treat scheduled for the meeting this Friday. Our evening presentation will be on recent discoveries in the outer solar system, given by none other than **Dr. Brian Marsden** of the Harvard Smithsonian Center for Astrophysics. Dr. Marsden is the director of the IAU Minor Planet Center and ran the Central Bureau for Astronomical Telegrams for over 30 years. Rumor has it that given any two observations of an object; Dr. Marsden can calculate the orbital parameters in his head :). See you there!

* Matthew Marulla
NHAS President 2006

Highlights for this Month

The radio astronomy group did another field trip. Read about it on Page 4. We also have a comprehensive report on the New England Astro Imaging Conference (NEAIC) on Page 2 This event occurs just before the NEAF event that several NHAS members attended.

I have a friend who has a background in civil engineering and he shared me a story while working with a long time geologist. He explained that Hoover Dam will eventually collapse. Might be 1000 years from now, but it will collapse. What does this have to do with Astronomy you may ask? The answer to both questions is "persistence". Water is persistent so eventually it will win. Just like some of our brave Astrophotography buffs that have managed to get some great shots even with the horrible weather. Read about it on page 3

* Rich DeMidio
NHAS Secretary 2006

Clear Sky Virus

Have you noticed your spouse or significant other complaining lately? Questioning you on why you seem crabby or irritable. Have your work colleagues been avoiding you or keeping their distance? Have you felt recently like you have been back in the 60's with monotone and no color? Have you just felt plain down in the dumps? Well, take notice since these can be all symptoms of the **Clear Sky Virus**, which has been circulating rapidly over the past few months in New England. Since this virus has attacked us, I have managed to observe once and that was from my deck with the Pronto. I am

challenged to find another time in which this virus caused as much disruption in recent time. What makes it worse is that the Sun will come out at times during the day teasing us, but then sure enough it clouds over again at night. So, to lighten things up I thought it might be fun to list my top 10 symptoms on whether you are suffering from the Clear Sky Virus.

- 10). You are applying on the web to various sky watch events over the next year across the country
- 9). Your wildlife photography has vastly improved
- 8). You have upgraded accessories for your scope or have built them yourself
- 7). You are looking at all the latest telescope advertising and considering a purchase
- 6). You have purchased more magazines or books
- 5). You have dusted your telescope
- 4). You have cleaned your eyepieces
- 3). You have cleaned the optics on your telescope
- 2). You are looking at real estate ads in the desert southwest

And the number one reason to tell that you are suffering from this virus.

You have already purchased or are considering a subscription to www.slooh.com

There is no formal cure that I am aware of relating to medicine. What I can tell you is that the best cure is sunshine and clear skies at night. The virus will lose its punch at the first sign of sunshine and rapidly departs on two consecutive clear sky nights.

* Rich DeMidio

NEAIC

Editor's Note: This article is a report from the recent New England Astro Imaging Conference. The author of this article Tom Cocchiaro provided all the pictures.

Those who missed the first New England Astro Imaging Conference lost out on a chance to rub elbows with some of the giants in the field who were as good onstage as they are behind the camera. Not only did they provide a special insight into their motivation and technique, they also hung around for the two days to talk to the more than 150 enthusiasts, including myself, who wanted to learn even more from this first-ever gathering of star shooters.



Astronomy giants kibitz around a TeleVue 5" refractor during a break at the NEAIC. In the picture are Astrophotographer and Author Don Parker (plaid shirt), AIP4Window's Jim Burnell (red necklace) and the Godfather of Modern Optics, Al Nagler.

In the lineup were such veterans as Rob Gendler, Tony Hallas, Robert Reeves, Richard Berry, Don Parker, Jim Burnell and Ron Dantowicz.



Tony Hallas relaxes amidst some of his work in the NEAF vendor area. He truly does have the whole universe in his hands.

As a newcomer to the hobby, I felt especially fortunate to hear stories of

the "old days" when the equipment was hand-guided and good results came only after hours, days and sometimes years striving to capture a subject in just the right way. I feel fortunate to live in a time where an astrophotographer can plan a session, and with the right equipment, put everything on "autopilot" eliminating the drudge work and making more time for creative interpretation and discovery.

Before joining NHAstro, I thought I was going to have to mortgage the house to get the equipment necessary to produce show-stopping images. After the NEAIC conference, and seeing what the veterans are using, I feel more hopeful about getting those images on a modest budget. In fact, Reeves, a Dennis Weaveresque Texan from San Antonio (and author of several books on traditional and digital astrophotography) has been using the same Celestron 8-inch and Nikon equipment for some 20 years.



Astrophotography Author Robert Reeves talks about getting award-winning shots on a modest budget. (Orion Nebula on Screen)

While he admits making the change to digital, and capturing the finer images that have eluded him with film (the first time he used his new digital \$100 web cam he finally got those images of the moon he'd been sweating toward), he is a master at getting the most out of his equipment and he tells you how to do the same in his books. Don Parker, a figure that made me think "here's the Ansel Adams of astrophotography," observes through what looks like a souped up PT-Boat torpedo tube or something from Luke Skywalker's

garage.



Astrophotographer and Author Don Parker, talks about the finer points of planetary imaging and post processing using K3 CCD Tools

During his entertaining presentation, he talked about being a "day late and a dollar short" in being the discoverer of Jupiter's second emerging "red spot." Said he got beat out by just a couple of hours. I was impressed by slide after slide of formulas he used to mix and match a careful balance of magnification, camera resolution and telescope to get the most out of an image. And the Ron Dantowicz show, well, let's just say you had to be there. Part showman, part scientist, part technician, part educator, he showed you why video was the only way to go in imaging deep sky objects—and some shallow sky objects like the International Space Station. Yeah, he pointed a 10-watt "death ray" green laser at the orbiting streak to lock imagers on the target for some of the sharpest ground-based pictures of the station ever taken. And he lives in our back yard. I think we should try to get him to the planetarium some time for his entertaining program, or take a field trip to his observatory at The Clay Center in Brookline, Mass.

And if you use AIP4Windows you missed a chance to talk to the creators Jim Burnell and Richard Berry. The duo spent an hour providing an insider's view of the most current version of their software, which provides just about every feature you'd want, in an affordable package, to get every last usable pixel out of a photo session—and at 16-bit resolution.

I also learned that astrophotography is more about the post processing than it is about taking the actual picture, not to say that pointing, aligning, focusing and waiting into good seeing conditions

are not important.



Ending his presentation, Rob Gendler demonstrates the power of Adobe Photoshop with a cartoon.

As a longtime photographer and photojournalist, I have always been good at pre-visualizing an image, and orchestrating light, positioning and timing to put me at the place I believe “the” image is going to happen. In astrophotography the image is never at the eyepiece given the human limitations of our seeing, but in the mind which sees beyond that faint gray fuzzy--through a truckload of filters, drive motors, OTAs, CCDs, software, and how-to books—to that finished work of art. Art that has been teased out of near nothingness into a spectacular vision of the heavens. In the military, we called the process behind technology-driven wonders “FM” (not frequency modulation). I think it’s more like alchemy—getting gold from lead.

From the feedback the organizers received after the NEAIC, the program will likely be offered again next year, so if you’re interested in astrophotography mark your calendars now for two days of inspiring presentations on astroimaging immediately preceding the NEAF event.



This New York license plate says it all.

I recorded audio at most all the sessions. If anyone is interested in getting a CD copy of the presentations in mp3 or .wav format, and some

photos from the conference, just shoot me an email at tomcocchiaro@comcast.net.

* Tom Cocchiaro

Astro Photons



Gardner Gerry – Photo by Chase McNiss

I have no formal report as we have not had a meeting at YFOS due to the uncooperative weather. However, that has not stopped several folks from sneaking in some time with pictures at odd hours so enjoy what follows.

* Gardner Gerry

It stopped raining!! Huzzah! Jupiter has been calling for quite some time, and now that it is past opposition, the weather finally cleared up enough last night to grab a few frames.



Photo by John Blackwell

Using a ToUCam Pro II webcam and about 1000 frames in positively horrible seeing conditions, I was optimistic and trying to see if we could grab the new Red-Spot-Jr. No luck, but we did see its daddy. Hopefully conditions will improve



Photo by John Blackwell

Both images are the same with some slight mods to the post-processing phase to show different details.

* John Blackwell

5/28. I went to YFOS last night. The seeing wasn't that good but it was clear and there was good transparency. I revisited the Swan and Dumbbell at 800 ISO as well as some globulars and M64 (still have some work to do). These are from stacks of 5 min frames. For higher resolution images go to last page at:

<http://community.webshots.com/album/230997590tTyFLv>



Swan Nebula - Photo by Herb Bubert



Dumbell Nebula, Photo by Herb Bubert I need to revisit this one and get some longer exposures to pick up the spiral structure around the core but here's what I got so far.



M64, Photo by Herb Bubert

* Blogs extracted by Rich DeMidio

Radio Astronomy



Antenna by Bob Sletton

*Editor's Note: I was unable to attend the tour, so I am including the pictures provide by **Dave Weaver**. Is there a technical reason related to signal acquisition on why the dish is enclosed?*

On May 27th, the radio astronomy group went on another field trip, this time to Haystack Mountain Observatory. Our own **Phil Shute** arranged for the tour in which several NHAS members attended. The group received a briefing and then a tour of the facility.



Phil briefing the audience

Recall from previous articles that the facility was recently acquired by the US Air Force and utilizes both Radar and Astronomy mode capabilities.



The view of the building / dome from the parking lot.

Before the tour, Phil provided a briefing to the attendees regarding the configurations.



The view of the telescope from within the dome.



The sub-reflector and dish front-surface.



Group picture taken under the edge of the dish.

* Bob Sletton

Deep Sky Object of the Month

Observer: Lew Gramer
 Your skills: Intermediate (some years)
 Date/time of observation: 19 June 2001
 00:30 Local

Location of site: Myles Standish Forest, S Carver MA US (Lat 42N, Elev 5m)
 Site classification: Exurban
 Sky darkness: 6.5 <Limiting magnitude>
 Seeing: 6 <1-10 Seeing Scale (10 best)>
 Moon presence: None - moon not in sky
 Instrument: 8x25 handheld binoculars
 Magnification: 8x
 Filter(s): None.
 Object(s): M39
 Category: Open cluster.
 Class: III 2 p/III 2 m
 Constellation: Cyg
 Data: mag 4.6 6.83m*; size 32'
 Position: 2132.2 +4827
 Description:

Taking a break from observation with Steve Clougherty's fine 17.5" dob, I swept the lovely Milky Way north of the Swan's tail tonight with John Bishop's fine little 8x25 binoculars. Quite by accident, I happened on this little fuzzy, and realized it was M39... Rarely does M39 hold much interest for deep-sky observers as it is sparse and essentially lost in bright field stars. But tonight, with this tiny aperture, it stood out quite intriguingly in the field, showing a very nice (if tiny) assortment of resolved pinpoints, amid a clumpy haze of unresolved stars. Worth a look in small binoculars!

* Lew Gramer

The Bottom Line

Starting Balance	\$3769.61 (checking acct)
Deposits/Credits	\$15.00 (membership + acct int)
A/P	\$46.67 (Insurance)
Net Acct Balance	\$3737.94
Cash Balance	Petty cash drawer (\$180.25 / \$51.00 in t-shirt sales) \$3918.19
Membership	128
New members	Amit Juneja
Donations	None

* Chase McNiss

Looking Back at Last Month

Editor's Note: My thanks to Chase McNiss who graciously volunteered to take notes at the last business meeting since I was unable to attend.

Opening Matt Marulla was not in attendance for the meeting; so VP **John Bishop** led the meeting. John commented that he was using a less technical presentation medium, specifically the overhead projector.



File Photo of VP John Bishop

Scope of the Month Paul Winalski brought in his new Coronado PST Solar Scope. Paul denied that all the recent rain was his fault, even though he has only logged about 15 minute's usage on the scope. **Paul and Joyce Icaza** mentioned that they have recently purchased the same scope and if there was any blame they would be willing to share it.

Paul showed the scope in it's packaging along with its 20mm Kellner eyepiece, TV mount adapter (extra), the tuner and focuser. Paul noted that although it is only a 40mm scope it shows granulation and prominences very well. Paul noted that for only \$500 it is a good way to get into solar Hydrogen-Alpha observing.

Public Observing. No report
Book of the Month. None
Committees. Photo Club Gardner Gerry noted that the weather has been the primary reason the Photo Committee has not met in the month of May and with the last weekend being the Memorial Day weekend that will probably not meet this month. Gardner commented that the committee will meet and plan to fine tune the Titan

mount at YFOS using the drift alignment method. Gardner also noted that there have been some requests from the membership to have a beginner's course in Astro Photography. Gardner noted that **Dave Weaver** has volunteered to help with the program, which is expected to happen some time in the fall of this year. **Web: Matthew Marulla** no report. **ATMs: Don Ware** reported that the ATM Committee has not been active. **YFOS Chase McNiss** noted that with all the recent rain the mud season has surely returned to YFOS **Membership: Bob Sletten** commented that the Membership Committee is still looking for a new leader.

Miscellaneous. Mike Townsend gave a report regarding his attendance to the Northeast Astronomy Forum that took place in Suffern the same weekend as the CMP Astronomy Day. Mike reported that there were numerous new vendors at the show and there was plenty of new equipment to drool over. Mike noted that he went to the show with Todd Miller and Chase McNiss who both reported that the speaker agenda was also very educational and entertaining.

A-Day Feedback. Paul Winalski reported that A-Day actually took place over 2 days. Paul reported that the skywatch that took place the Friday evening before the Saturday festivities was well attended with at least 75 people. Paul reported that prior to darkness setting in they were entertained by a brass band and that once darkness set in the skies were clear and steady. It was overall, a good session. Paul reported that on Saturday the weather was drizzly and cloudy. Paul reported that we had a good location with more traffic than we have had in the last few years. Paul reported that he got in a little bit of lunar observing with his 14" dob, "Mt. T" Paul also reported that there was a climbing wall close by and it brought a

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lot of people past the NHAS area.

A member in attendance asked if there were any comments or suggestions regarding this years A-Day event. One member commented that they were disappointed by the lack of effort by many of the members in attendance to interact aggressively with the public and take the time and effort to engage the public. The same member commented that many of the members grouped together and talked amongst themselves. Another member commented that they were disappointed by the low number of t-shirts sold and wondered if the design was the reason the shirts did not sell. Another member commented that they did not think the sales were poor because of design but had to do with the poor initiative of the members in attendance. One member commented that they were ashamed by the lack of enthusiasm of the astronomers and the poor overall organization of the activities.

New Boston: Dave Weaver

commented that while looking over the New Boston town website he noticed that the tracking station was holding and environmental meeting and was inviting town residents to attend. Dave stated that he attended the meeting and then got Mike Pellitier to contact the tracking station and was glad to report that Mike will be meeting with representatives from the tracking station in the next week.

Evening Program. No report

* Chase McNiss

Member Blogs

May 28th. A friend was visiting and we decided to use Jean's Orion 6 inch Dob and my pronto on my deck since it was nice and cool and no bugs. Conditions were good but my neighbor had their light on so that messed up things a bit. I must say how impressed I am with the Orion products given their cost. Very happy I got that scope for Jean as her starter scope.

I started off looking at Jupiter and ended up looking at it for quite a while. Conditions were quite good and I was easily able to see the North and South bands. Now I looked again and again to verify but I swear that I saw the red spot on the south band (inverted on this scope it would have been on the top). I said nothing to my friend Jeremy and when he looked at it he also commented about its presence. I used my 12mm Lanthanum eyepiece for viewing. The four moons were visible but one was about to go behind the planet.

Was able to see M13 and M92 easily and even M57. Was able to make out the shape of M57. Both 13 and 92 resolved individual stars. At this point, I let my friend Jeremy take the helm and he had a ball with the scope. I setup my Pronto and did some double star hunting from Sky and Telescope articles. Was able to resolve several in Lyra and Hercules. I also found a very red star in Lyra which could be "T Lyra" which I believe is a carbon star. I have to look on my map to verify but can also show folks when we are together again.

Albireo was beautiful as usual and was looking in the M39 region of Cygnus. I

also found the globulars in Ophiuchus but cannot remember their names. Have to look those up as well. Most of time, I was just panning with my 32mm Plossl finding several doubles and small clusters.

The clouds rolled in from the East (very wierd) just before midnight so I packed it in. Hoping to go to YFOS Sunday if others decide to go.

* Rich DeMidio

May was not at all kind to astronomy: weather! Arg 😞 Here is an image showing the school observatory masquerading as a beach! We were within one vertical foot of being flooded.



Photo by John Blackwell



Photo by John Blackwell

* John Blackwell

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E-mail articles to the Editor.

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This month's contributors:

Mathew Marulla, Chase McNiss, Bob Sletten, Lew Gramer, Gardner Gerry, Herb Bubert, Rich DeMidio, John Bishop, Paul Winalski, Dave Weaver, John Blackwell, Tom Cocchiaro

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



NHAS Upcoming Events

Recent discoveries in the outer solar system

Event	Date	Time	Location
Business Meeting	Jun 16	7:30 pm	CMP
Coffee House	Jun 23	Dusk	YFOS
CMP Skywatch	Jul 07	Dusk	CMP
Public Skywatch	Jul 19	Dusk	Goffstown Public Library
Business Meeting	Jul 21	7:30 pm	St. Anselms College