

Put together by  
Rich DeMidio

# The NHAS Observer

Newsletter of the New Hampshire Astronomical Society



Vol. 2023 No. 12

"All the news that fits in print"

December 2023

## December Pot Luck



Photo by Ed Ting

## IN THIS MONTH'S ISSUE

Editor's Message.....	2
NHAS Pot Luck.....	2
NHAS Elections.....	10
NHAS Awards .....	11
Public Skywatch summary .....	21
Windham Presentation and Skywatch (multiple).....	26
Wilton Library Skywatch (multiple) .....	27
Hampstead Middle School (Mark Fernald).....	28
Nashua Holiday Stroll (Joe Dechene).....	30
Eastman Presentation (Dave McDonald).....	30
Cawley Middle School in Hooksett (Robert Frieland).....	30
Newfields Public Library (Ed Norton) .....	31
Sidewalk Astronomy in Portsmouth (Tom Cocchiaro) .....	31
In-Reach Report (Phil Babcock) .....	32
In the News (Steve Rand).....	34
ASTRO PHOTONS .....	35
CLUB AND OTHER LINKS OF INTEREST .....	35
SUMMARY .....	36

## Editor's Message

What a wonderful year 2023 was for our organization. Public Outreach and In-Reach activities were very high. We saw new enthusiastic people stepping up and contributing in their own way. Communication amongst the membership has also increased and we even had a few face-to-face meetings. It's really good to see this and to have it carry on to 2024.

## NHAS Pot Luck

A tradition since I have been a member has been the annual pot luck dinner for the December meeting. It was nice to see this restarted after the last several years due to the pandemic. The food is of course the highlight with a variety of cuisine showcasing some of the club's other talents. Lots of time to network and celebrate the year. Photos provided by Ed Ting and Phil Babcock

*Editor's Note: Took me a while to recognize some of the long-time members. As a little game, I logged the names of some of these folks at the end of this publication. Take a guess and see what I came up with at the end. I will say that Y'all looking well!*



*The Main Attraction 😊*















A poem by **Alex Slocum** that was written for the event. I can definitely relate!

**Hark the Dark**  
By Alex Slocum  
Stardate 2023.12.8

Here's to New Hampshire Astronomical Society  
Ever gazing upwards at heaven's variety  
Motto is Live, Look, Freeze and Try  
To find new things in the sky

Looking for that dark spot  
Where there is light naught  
Looking through scope's lens  
And making many new friends

Not depending on any theology  
But rather ever better technology  
And actual real good Intelligent Design  
To create amazing telescopes ever more fine

Because never there'll be an end in sight  
As somewhere it will always be night  
And greater than Light's velocity  
Is boundless human curiosity

## NHAS Elections

39 proxy ballots were submitted. There were no write-ins. There were no in-person votes cast at the December NHAS meeting.

Chris Smith, Mike Atkinson, Pete Smith, and Paul Winalski each received 39 votes. Alison Bentley received 38 votes.

### **So our officers for 2024 will be:**

President: Chris Smith

Vice President: Mike Atkinson

Treasurer: Pete Smith

Secretary: Paul Winalski

### **The 2024 Board of Directors will be:**

Chair: Dave Roy

2nd year Director: Tom Cocchiaro

1st year Director: Alison Bentley

Congratulations to you all, and thanks to those members who participated in the election.

## NHAS Awards

Several members were recognized for their service in 2023. They were nominated by club members and I was provided some bullet points regarding each contribution. I have word smithed some content slightly for flow. Out going president **Joe Dechene** presented these to several club members.



Awards lined up to be handed out

**Phil Babcock.** Phil has passionately pursued his love for visual astronomy by providing monthly projects for members to learn the night sky. The programs he puts together benefit many members with varying degrees of knowledge about the night sky. He has provided a great service to the club. Phil's expertise benefits the beginner, novice, intermediate, and even experienced visual astronomers. His monthly contributions are professional written, researched and published. He promotes many old school techniques to accommodate those that do not wish to just press the button.

**Tim Printy** took over as YFOS caretaker when Larry Lopez retired. Tim is a key member running YFOS, he is there almost every clear night, opening it up for the night, being available for walk throughs, helping setting up equipment, and being available for any questions that come up. With Dave Roy, he has been extremely helpful in keeping YFOS in tip top shape. Tim's efforts have resulted in more members than ever using YFOS as a resource for their observations.



Photo by Ed Ting

**Steve Rand** provides a monthly in the news report to the club on all kinds of intriguing topics in the work of Astronomy. Steve has also been helping with the library telescope program specifically seeding planispheres into libraries.



Photo by Ed Ting

**Tom Cocchiaro** has been organizing and running the monthly sky watches at Market Square in Portsmouth. When the weather cooperates, this can be an intense event with hundreds of people passing through. Tom effectively gets club members organized and ready to take on the crowd!



**Dave Roy** has been working a lot on YFOS handicap access. " It's a no-brainer" Recognizing him for all the work he did this fall at the Observatory. Access ramps, etc We all have seen the pictures of his great work. He embodies the spirit of a club member who is willing to go the extra mile in supporting the club.

In addition to showing up at many sky watches, Dave's big contributions can be found at YFOS where he has led many projects in addition to providing the labor. At of work goes into planning such as the planning, purchasing (and scrounging) materials, getting materials and equipment brought there, and leading a team of less-skilled volunteers. The time commitment to complete these projects is way beyond what can be expected of members of a volunteer organization. It is rare to find someone in a volunteer organization so willing to take on big projects and pull them off with such good results and little fanfare. We are very lucky to have Dave. He is an inspiration in all he does for YFOS and the cheerfulness with which he goes about it.



Photo by Ed Ting



**Dave McDonald** has done great work on his broadcast series, as well as all his work at the MSDC and with his astronomy club. Dave is a long-term member and even before becoming a formal member, he hosted NHAS meetings at the planetarium. Dave has also presented multiple times at NHAS meetings, some of those being presentations inside the planetarium. Dave has also provided last minute presentations when speakers had to back out.



Photo by Ed Ting

**Marc Stowbridge** is a former president, long term NHAS member, and founder of the now famous international Library Telescope Program. That's right, incase some newer members did not know, our own NHAS member founded the LTP. Over the past year, Marc has led the effort for the weekly solar work and observations at the Castle in the Clouds.



**Alvin See, Stan Herman, John Chappell** These three members has provided much off the heavy lifting at the weekly Castle in the Clouds solar observing sessions. All have participated at Castle in the Clouds on a regular basis, usually for 4 to 6 hours at a time and have even come to the Castle on rainy days providing astronomy talks at the Carriage House. They often come on additional unscheduled days during the summer, particularly on weekends, and again, spend over 5 hours working the crowds.

It is typical that an event will host over 100 people, (our record was 238 people, but the recent eclipse attendance was much bigger) showing them the Sun through Ha and white light scopes. We instruct people of all ages how to use solar viewers that they can keep. The group brings all sorts of displays to educate the crowds, and it's great to see how well they "read" their audience, engaging with young children and adults effectively, using age-appropriate terms and topics.

The guys are great ambassadors for the club and really get people excited about science. They also work wonderfully with the Castle staff. (no photos provided)

**Pete Smith** has given a lot of time to NHAS as the Treasurer and Library Telescope Program (LTP) coordinator. The treasurer's job itself would take up all the time but Pete also manages NHAS membership in the Astronomy League. This is the program where NHAS members are sponsored so they can work on AL projects. For example, a Messier Marathon award. Pete drove this effort and continues to manage it today.



Photo by Ed Ting

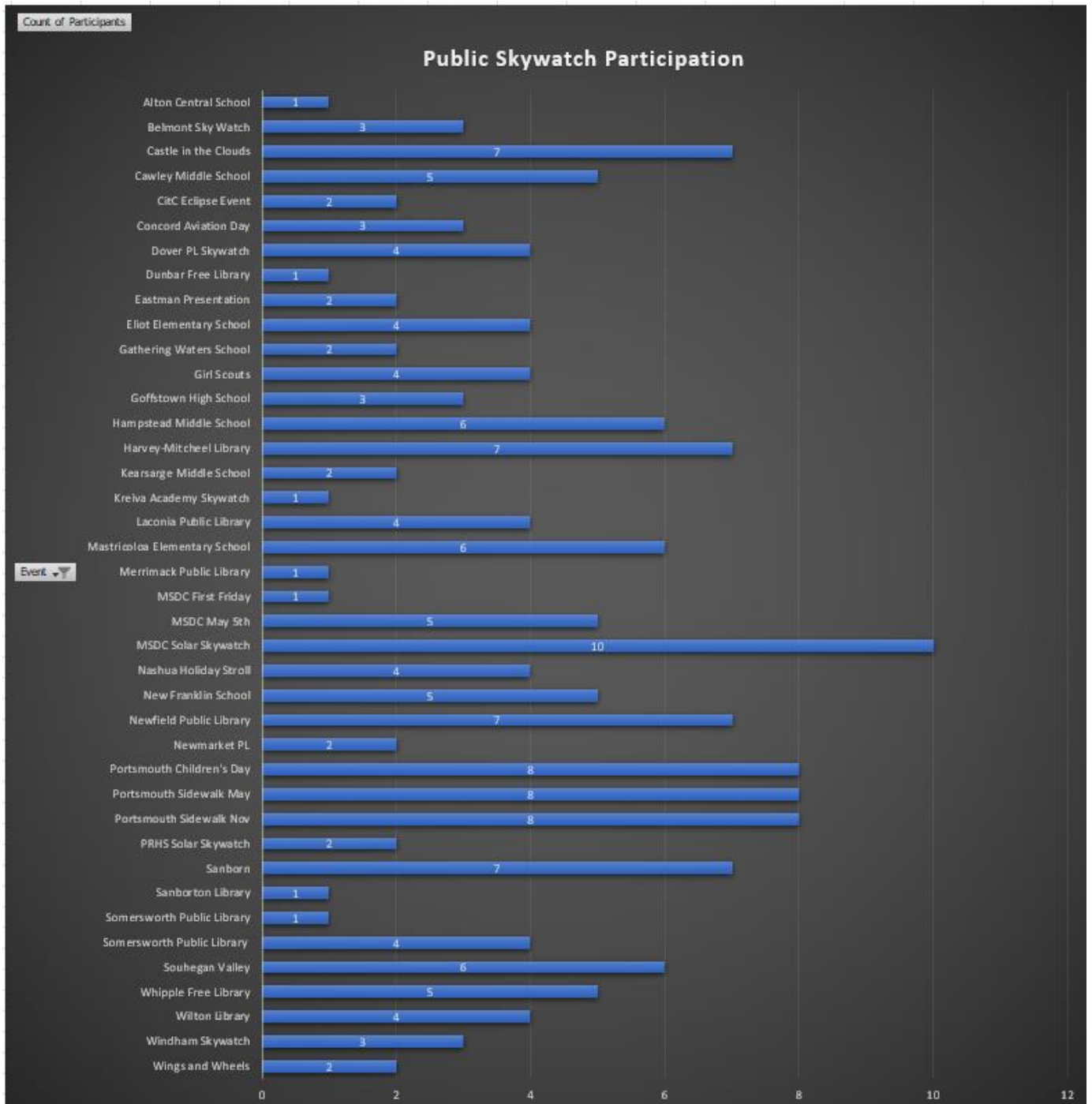
**Paul Winalski** is maniacally focused on executing on the primary mission of the club regarding public outreach. Without his efforts coordinating Sky Watches, a vital part of the mission of the club would atrophy. In addition to being the secretary, Paul also runs the public Sky Watches. The amount of coordination it takes with the requesting organization is huge. Observing and/or presenting locations have to be found, and then weather calls have to be made. But most of all he is able, nearly without fail, to get presenters, Designated Astronomers and members with telescopes to show up at the right places and times. What is truly impressive is that this cadence continues year-round, and he handles it with grace and skill year after year, fulfilling one of our goals of bringing astronomy to the public.



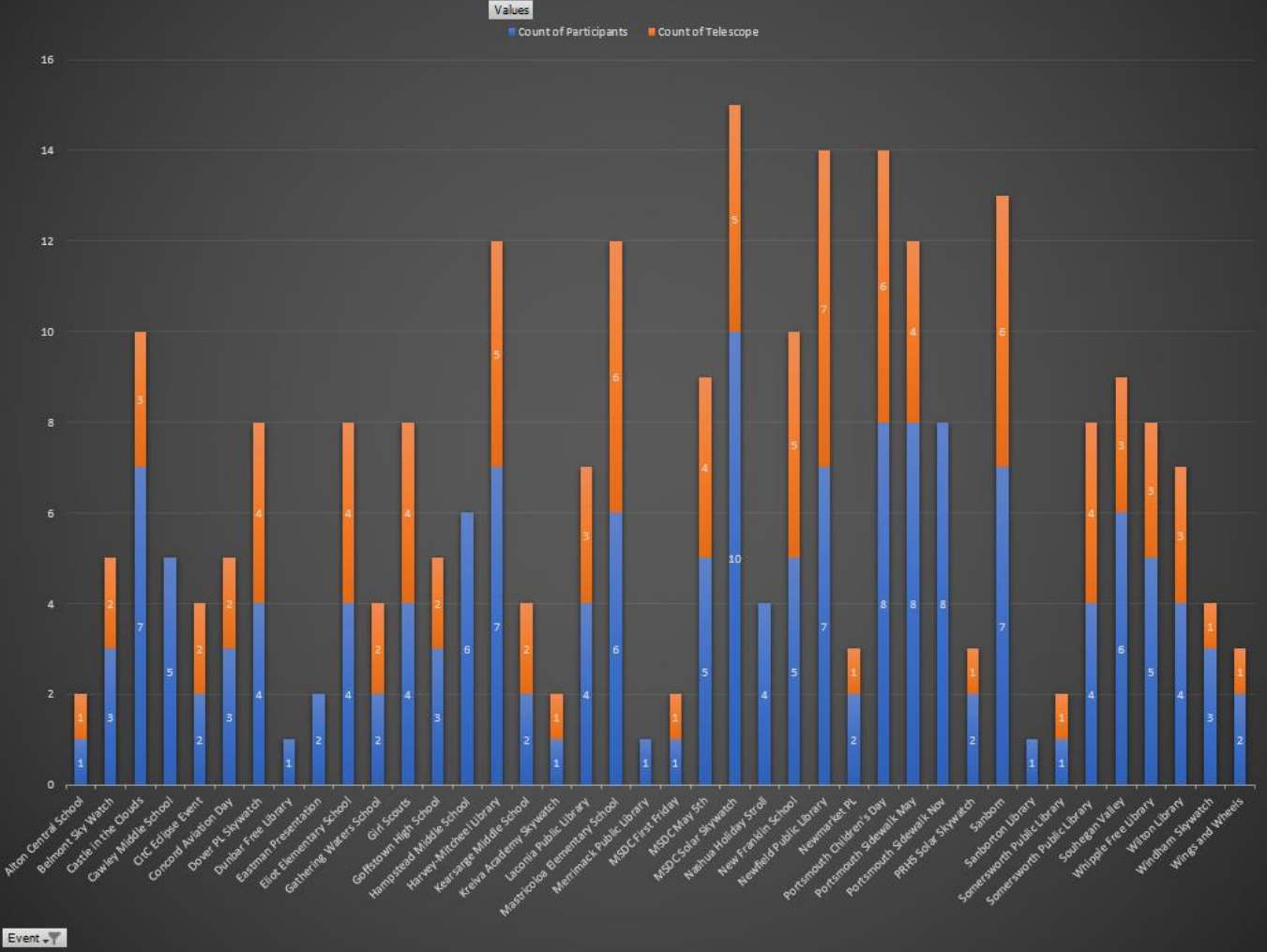
Photo by Ed Ting

# Public Skywatch summary

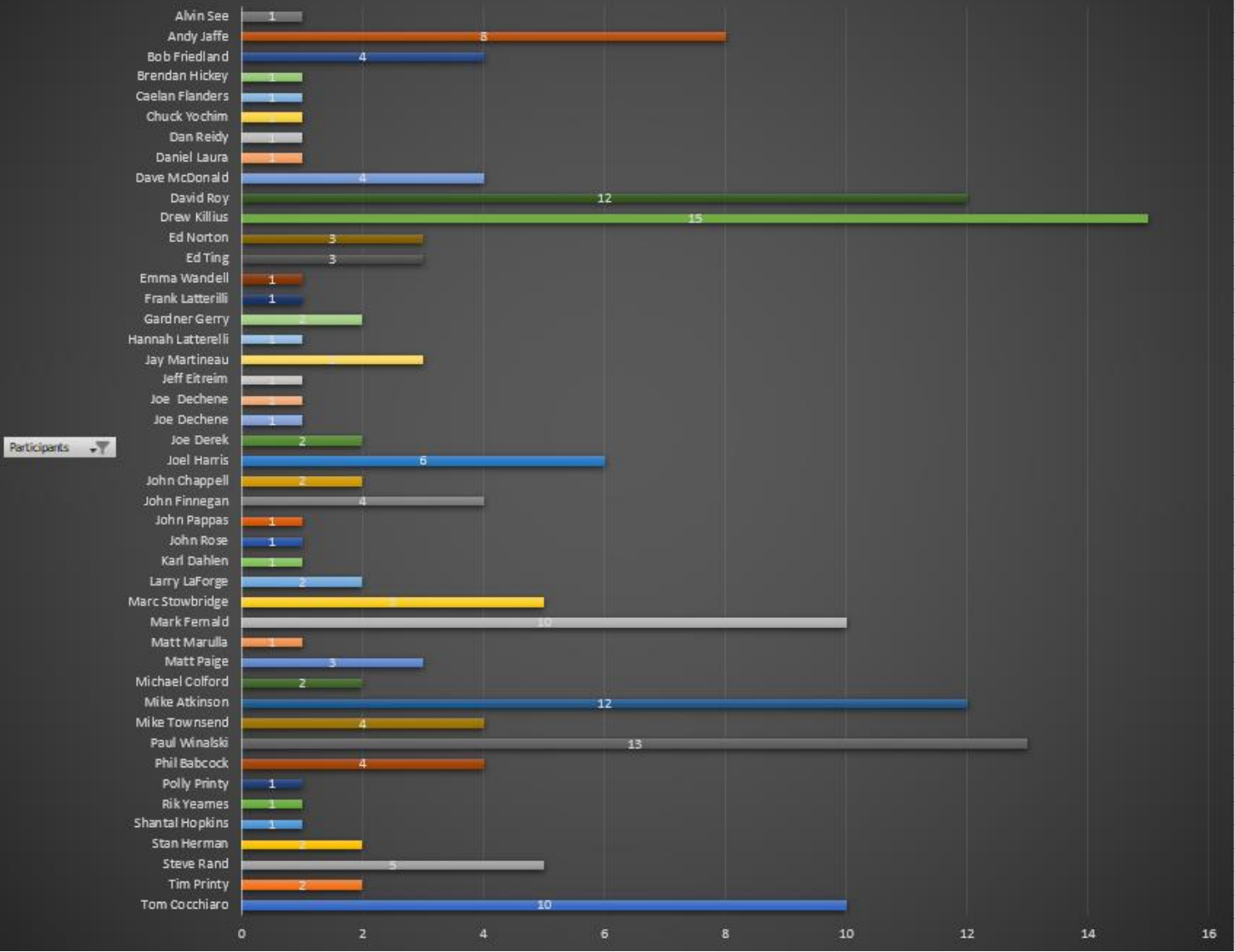
Final results from 2023. All charts are sorted alphabetically.



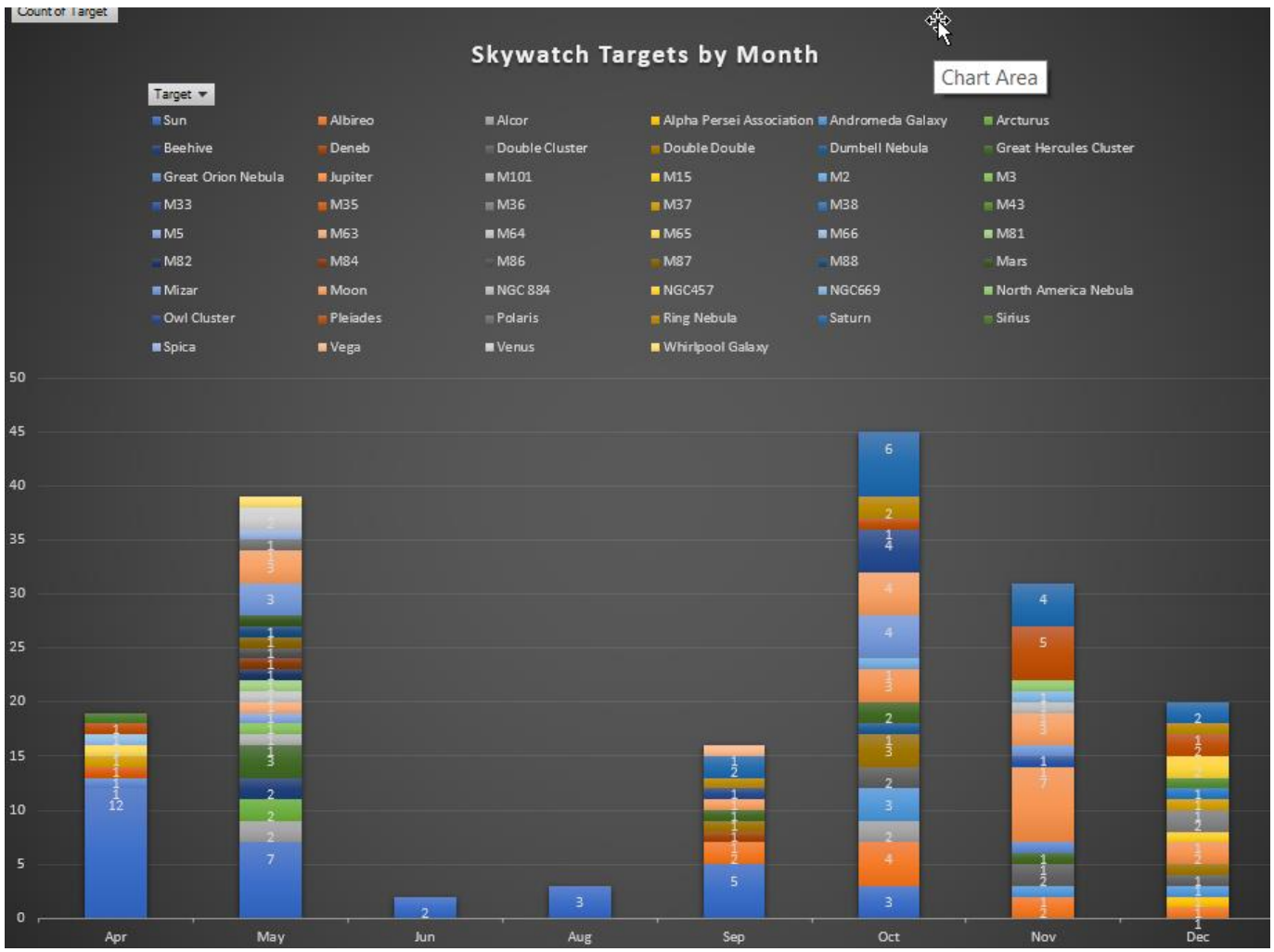
### Participant and Telescope Breakdown per Event

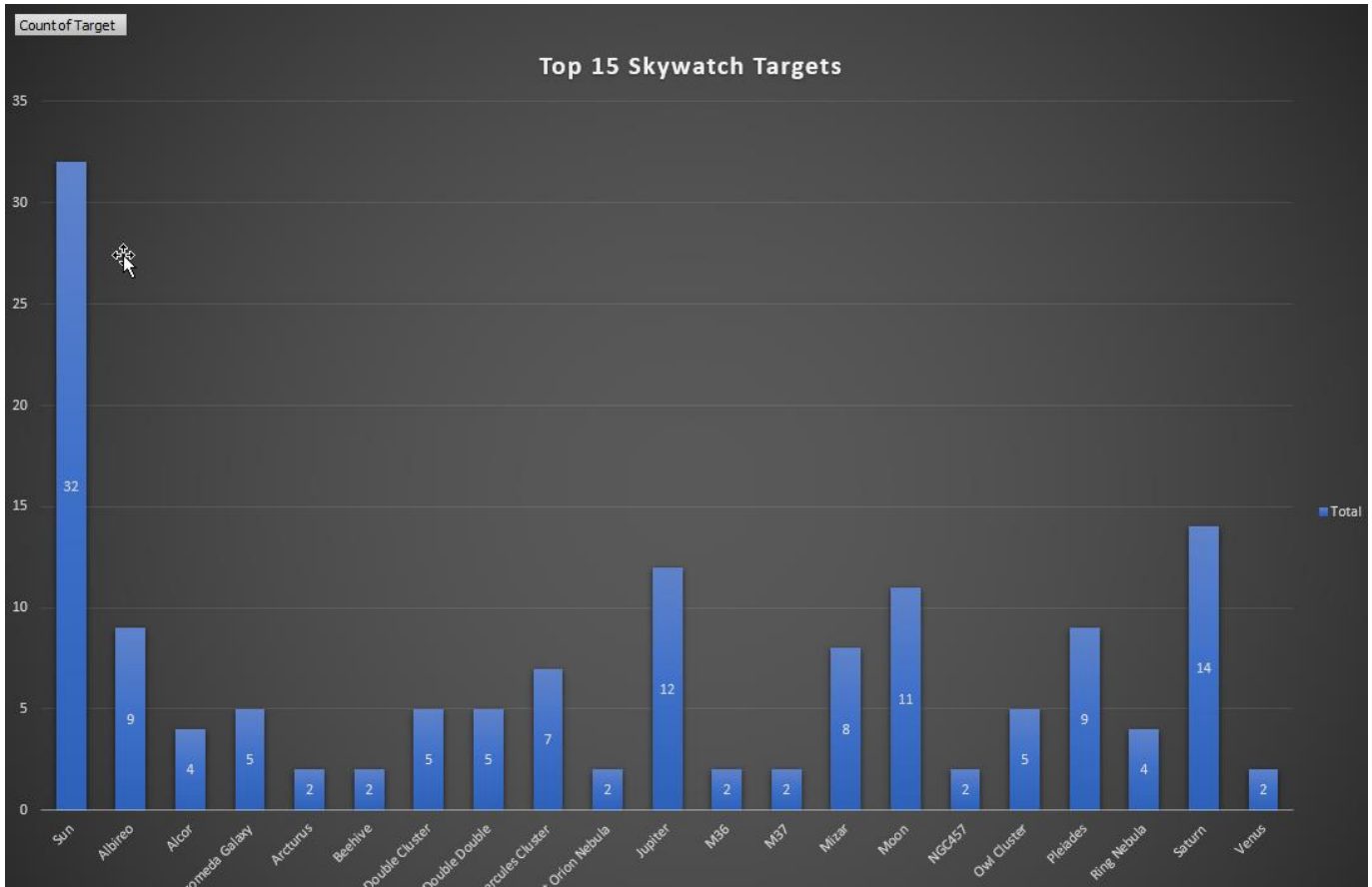


### Public Skywatch Attendance by Member









## Windham Presentation and Skywatch (multiple)

**From Paul Winalski:** Excellent attendance for the indoor presentation. 60+ and standing room only in the science lab we were using.

The patch of overcast skies that came in for the start of the observing was a big disappointment, especially as we had such a big crowd and such good NHAS attendance. This was not what the weather forecast had predicted.

Fortunately, it did clear up some as the night progressed. I think everyone got to see at least Jupiter and its moons, two of which were hidden (at least one in eclipse) when the session started. We also got some so-so views of Saturn. Others have reported on the various DSOs they were able to find. I was able to direct one NHAS astronomer (I forget who) to NGC 457, which had been in the presentation. The students who stayed to the very end were rewarded with a view of the Orion Nebula. One student saw three Geminids.

**From Mike Atkinson:** There were about 60 Science honor society students in the lecture. When the lecture started, at 6:00 pm, the skies were nice and clear. The air cold and crisp. I attended most of Paul's presentation and when I came out to finish setting up at 7:05 ... clouds, clouds, clouds.

All the students and teachers came out from the school about 7:15 (ish) ... still clouds. I think Dave may have a view of Jupiter through the clouds. After about 15 or 20 minutes a couple of breaks in the clouds became sufficient for (I think) all of us to point at Jupiter.

A bunch of the students with me gave out 'Oh My Gosh' and 'Wow' when they first saw the Planet. It cleared a bit more as time went on ... But was spotty most of the night.

I was able to point at Jupiter, Saturn, Epsilon Lyrae ... was very unstable, when viewing through a lot of atmosphere ... but I did show it to point out a double star ... and that stars, even at differing magnification are just points of light, unlike the planets. Finally, really kind of late in our view, looking to the North cleared. So Auriga, Taurus and Orion came into view. I pointed out M36 and the Orion Nebula (through the trees) in my telescope. And we had some view the Pleiades through the binoculars. All of the students and teachers left by 8:30 – 8:40. A few society members hung out to see Io come out of Eclipse. Everyone had left by 9:15.

**From Brendan Hickey:** As I drove down to Windham I could see the stars going out one by one. By seven thick clouds had rolled in obscuring everything. I wasn't keeping close track of time, but I'd guess we started getting breaks in the clouds around 7:30, particularly near Jupiter. Thankfully the students stuck it out in the cold. Conditions improved through 9 when we packed up after watching Io come out of the shadows. I spent most of the night pointed at Jupiter and the Pleiades. Honorable mentions go to the Orion nebula, Saturn which was low on the horizon and so hazy I could barely see Titan, and a pine tree which provided entertainment while waiting on the clouds.

## Wilton Library Skywatch (multiple)

**From Mark Fernald:** We had a very interesting time in Wilton tonight. I arrived at 6:15 and met Bettilue there. It was only partly cloudy, so I set up the scope. Phil Babcock and Ed Ting arrived shortly after that. Then it started snowing! On went the lens caps and we stood around chatting for a few minutes and then it cleared up enough to do some observing. The sucker holes determined what we looked at. About a dozen or so folks and kids showed up and we all had a good time. Phil has a more detailed list of what we looked at. And everyone saw several Geminids.

**From Phil Babcock:** As Mark reported, we started off with a snow squall. But it cleared as quickly as it arrived, leaving no snow on the ground, and the skies were 75% cloud-free when the guests arrived. In the meantime we found out how cool a laser pointer looks when it's snowing!

The evening was one where most of the time we were 75% clear. But we also had a few periods where we were chasing the 25% holes across the sky. The clouds were moving quickly so there was always something to see.

The guests were there from 7:00 to 8:00. As Mark reported, about a dozen.

Mark had his Celestron C6 on his (newly acquired, used) iOptron mount. He showed folks Jupiter. All 4 moons were visible, with Io creeping closer to Jupiter during the observing session. He also shared views of Saturn, M31 (the Andromeda Galaxy), M57 (the Ring Nebula), M45 (the Pleiades), and the colorful double star Albireo.

Ed Ting brought along his trusty Orion 8" Dobsonian. He gave people nice views of the Double Cluster in Perseus, NGC 457 (the E.T. cluster, among its many names), M36+M37+M38 (the 3 open clusters in Auriga), M15 (a globular cluster in Perseus), Saturn, Jupiter, and Albireo.

I had my Tele Vue TV-85 refractor. I pointed to Jupiter, Albireo, M52 (an open cluster in Cassiopeia), M29 (an open cluster in Cygnus - not too impressive, but I was waiting for a cloud bank to clear in other parts of the sky), and M45. I meant to get to Uranus, but ran out of time.

I passed around binoculars and helped people see Jupiter, the Pleiades and the Alpha Persei Association. Oh, and there were at least 6 Geminids seen in an hour - not at all a bad showing for that time of night.

As we finished packing up, another snow squall started. This time it left a little snow on the roads.

We had snow 15 minutes before the start of the sky watch and 15 minutes after the end. It just goes to show that even the weather gods don't mess with Paul Winalski's forecast for a sky watch!

It was a good time.

## Hampstead Middle School (Mark Fernald)



Photo by Joel Harris

A great time was had by all at Hampstead Academy last night. The sky cleared up nicely and we managed to get far enough away from the flood lights to observe. We had seven scopes there, so no lines, no waiting. Several refractors and big and little reflectors. On the order of 25 - 30 families participated, and the children seemed interested and engaged in the observing. Thanks to Andy Jaffe, Daniel Laura, Joe Derek, Mike Atkinson, and Drew Killius. If I left anyone out, please let us know you were there. The usual suspects were observed: Jupiter, Saturn, M31, M13, Pleiades, I think I heard Mike showing Alcor/Mizar (which was in the trees for me). If you looked at something else, please append this.

**From Mike Atkinson:** I did show several people a double star, but it was Epsilon Lyrae, the double double ... not Alcor & Mizar. The Pleiades, in the my binoculars, with a 4.7 degree field of view, are a winner. In my telescope, my lower power eyepieces don't provide a large enough FOV for this cluster. (Oh darn, that means I've got to get a new eyepiece or two). The lights were a bit too much for me to find the Ring Nebula.

**From Andy Jaffe:** Yes, a nice evening. I showed the Double Cluster. People liked how many stars appear when you look at an area of the Milky Way.

I received the following from Martha Denisky at Hampstead Middle School.

Thanks to all from NHAS who participated. Ya done good!

-Paul W.

----- Forwarded message -----

Date: Fri, 1 Dec 2023 07:16:06 -0500

Subject: Re: 5th Grade Skywatch Event at Hampstead Middle School

Good Morning!

I wanted to email and say THANK YOU so very much for taking your time to share our night sky with the fifth graders and their families. The kids were beyond impressed and had lots to share the next day!

Have a wonderful holiday season, and I hope to see you again next year!

(Please forward to anyone who is not on the email list here too :)

Martha Denisky

## Nashua Holiday Stroll (Joe Dechene)

There were 4 of us there with scopes: I was with Mike, Dave, Drew. Andy also participated and prepped those in line with astro facts and rules for looking through the telescopes.

Holiday stroll crowds, lines at each telescope. Targets included Moon, Jupiter, Saturn, Pleiades.

For many people, it was their first time looking at such objects through a telescope and their reactions were priceless.

*Editor's Comment: When I read about this, I could not help think about Ken Charles who years ago, arranged this event with the city. Ken passed early in 2023 and was a long-time member of NHAS. He founded this event, served as NHAS treasurer for years, and setup the online shop for NHAS apparel. I have fond memories of observing with Ken and he loved NHAS and public outreach.*

## Eastman Presentation (Dave McDonald)

The Eastman presentation in Grantham went very well. About 60 attended. Rik and I talked about the details of the upcoming solar eclipse with our slide presentation. We displayed many artifacts from Rik's collection and had the EclipseMobile on display outside. The presentation was about an hour with another 30 minutes of Q & A and informal questions and tables and car viewing. Wonderful, modern, tech equipped facility!

Dave McDonald and Rik Yeames

## Cawley Middle School in Hooksett (Robert Frieland)

What an amazing turn out at tonight's Skywatch at the Cawley middle school in Hooksett.

I would guess there were at least 75 guests.

It was very cold but well worth it.

I brought my 10 inch Dobsonian, nicknamed the Red Cannon.

The moon was the hit of the night.

Jupiter, Pleiades, NGC 869 were all close seconds.

We had plenty of astronomers each sharing their own favorites.

## Newfields Public Library (Ed Norton)

The Newfields sky watch was a good time. There was a good number of guests despite the chill. A number were very interested and we kept going until around 9 I think (Orion was just coming up). Joel used his SCT to show off Jupiter and Saturn. I went digital (of course), and put the C6-Hyperstar up against the Seestar s50. Visiting groups saw the Helix nebula, M33, the North America nebula, Orion Nebula, and the Pleiades. I also passed around my binoculars which were great for the Pleiades and everyone was surprised you could see Jupiter's moons with just binoculars.

## Sidewalk Astronomy in Portsmouth (Tom Cocchiaro)

After several months of weather cancelations for the Sidewalk Astronomy Program in Portsmouth we finally cut a break Saturday, Nov. 18 as a handful of NHAS members traveled to Portsmouth to share with visitors in the city's Market Square. Despite an iffy weather forecast during the week I believed the Clear Sky Clock prediction for Nov. 18 that called for the thick clouds that were still evident at 4 p.m. to move away within the hour. Sure enough the sky cleared around 5:30 p.m. for a long evening of observation that included unusually steady and clear views of Jupiter, Saturn and the almost quarter moon. As usual we were slammed with crowds of curious visitors all evening starting at 5 p.m., finally wrapping up the evening around 11 p.m. Participating Astronomers were Dave Roy, Andy Jaffe, Mark Fernald, Drew Kills, John Finnegan and his girlfriend Emma Wandell, Frank and Hannah latterelli and Tom Cocchiaro.

### Scopes List

- ✓ Andy Jaffe, Stellarvue Access 102mm
- ✓ Dave Roy, Explorer Scientific AR 127mm
- ✓ John Finnegan, Apertura AD8 DOB
- ✓ Drew Killius, homemade 5-inch f9,6 Refractor
- ✓ Tom Cocchiaro, Orion 180mm Maksutov
- ✓ Mark Fernald, 8-inch Meade LX90

### Other participants

- ✓ Emma Wandell
- ✓ Frank and Hannah latterelli



## In-Reach Report (Phil Babcock)

[https://drive.google.com/file/d/1JudAQ7zqtJm9a6zggHyqnRF-hVGpy1C8/view?usp=drive\\_link](https://drive.google.com/file/d/1JudAQ7zqtJm9a6zggHyqnRF-hVGpy1C8/view?usp=drive_link)

Fellow Astronomers:

A pretty regular request from members that want to join in the fun at a public sky watch is, “What should I point my telescope at?” I’ve been there (not very long ago). We all have. In coordination with Paul Winalski (our coordinator for sky watches and experienced observer) and Rich DeMidio (a former NHAS President and experienced observer) I put together a list for December of things that tend to be crowd pleasers and are easy to find. If people find this helpful (for sky watches or just as a list of fun things to have a look at any clear night), let us all know.

### December:

1. Saturn
2. Jupiter
3. The Moon
4. M45, The Pleiades
5. M31, The Andromeda Galaxy
6. NGC 457 in Cassiopeia
7. The Double Cluster in Perseus (NGC869 and NGC 884)
8. M34 in Perseus

The attached file has a little more info on each. The order of the entries in this list is somewhat aligned with what I believe are the things get the biggest “Wow!” from guests. Depending on the number of telescopes and guests at a sky watch will determine if you remain on one object for the whole evening or find that you need to show a few objects to the guests. I believe it is rare that you have a chance to show 5 or 6 objects. I don’t recall ever having shown that many.

This list is not a “required” list for sky watches. It is being provided in case you aren’t sure where to start. There are certainly many more targets people like to show at sky watches. You can point your scope at any target you want to, and move from target to target in any order you want to.

It’s a good idea to practice finding the things you may want to show people BEFORE the sky watch. But don’t be intimidated. Notice that the biggest crowd pleasers tend to be bright, so they are easy to point a scope at.

I hope to see you out at a sky watch!

*Editor's comment: These objects are valid for January*

## Constellation of the Month (Phil Babcock)

<https://drive.google.com/file/d/1nqkx9SFreDQlooiEo7nUTWAgXPcTa4CN/view?usp=sharing>

Fellow Astronomers:

Here is the 9th Episode of “The Constellation of the Month-ish”.

In this Episode we explore Perseus. We go after some fun and flashy targets in Perseus that seem to be generally overlooked: The Alpha Persei Association and the open cluster M34. The Association is a large collection of stars around Perseus’s brightest star, and has lots of opportunities for make-your-own asterisms. It looks spectacular in binoculars or a finder scope. M34 is a bright (5.2-to-5.5 magnitude) and sparkly. It looks good in binoculars or a finder scope, and really shows its stuff when viewed through a telescope. Each level of magnification brings out more and different details. Not to overlook the obvious, we also cover the always-popular Perseus Double Cluster. Along the way we have a look at Algol, a variable star with some interesting behavior.

In these episodes, binoculars are mentioned pretty regularly. This isn’t to imply that you should only look at these objects with binoculars. Rather, in support of the mission of “The Constellation of the Month-ish”, which is to help beginners learn how to find things in the sky, the message here is that a lot of amateur astronomy can be done with just binoculars. Also, by focusing on objects that can be seen in binoculars, they can just as easily be seen in a finder scope, and that gets the telescope pointed there and the telescope will provide a different view and experience of the object. We build the skills of finding things in the sky with these easier, but rewarding, targets.

While “The Constellation of the Month-ish” is mostly for the members that are in the earlier parts of their journey, more experienced members can join in by sharing their favorite objects in this region, or share photos of these objects that they have taken.

And, of course, I welcome the always interesting and educational corrections people offer.

Happy hunting!

## In the News (Steve Rand)

### Asteroid Sample Brought Home

The Bennu asteroid sample is now in a “clean room,” in the hands of scientists. Preliminary data released suggests the sample contains iron oxides, sulfides, water bearing clay fibers, and more carbon than in any meteoric material found so far. Samples will be distributed to various agencies for study over the next weeks and months. With the sample drop off, OSIRIS REx got a name change. It’s now OSIRIS APEX and on a six-year journey to the near-Earth asteroid, Apophis. Once there in April of 2029, it will orbit Apophis for 18 months and then do a surface touch similar to what it did on Bennu. No sample collection this time, just spacecraft cameras and sensors.



## ASTRO PHOTONS

Many club members have been showcasing their astrophotography talents on the Astro-pictures channel in Slack. Please go there to review photos as it would be terribly redundant to include them here. In addition, Herb Bubert takes a sampling from that channel posting them on the club's Facebook page on a monthly basis.

## CLUB AND OTHER LINKS OF INTEREST

Facebook Page:

<https://www.facebook.com/search/top?q=new%20hampshire%20astronomical%20society>

NHAS YouTube including some enablement education:

<https://www.youtube.com/@newhampshireastronomicalso1786>

NHAS Club Calendar:

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

Did you know that Slack offers analytics? It's pretty cool if you are a metrics nerd like me 😊

<https://nhastro.slack.com/stats#overview>

LTP YouTube channel

<https://www.youtube.com/@librarytelescope>

Dave McDonald YouTube channel

<https://www.youtube.com/watch?v=iT6GsCfIFlw>

Ed Ting YouTube channel

<https://www.youtube.com/@edting>

Phil Babcock In-Reach materials (let me know if you cannot see the folder)

[https://drive.google.com/drive/folders/1eVm896w7E\\_cGyLEdYP4QSRJIZGI8RPU3?usp=share\\_link](https://drive.google.com/drive/folders/1eVm896w7E_cGyLEdYP4QSRJIZGI8RPU3?usp=share_link)

Marc Stowbridge provided this link to an LTP brochure:

[https://librarytelescope.org/images/flyers/International\\_Library\\_Telescope-2023-flyer.pdf](https://librarytelescope.org/images/flyers/International_Library_Telescope-2023-flyer.pdf)

## SUMMARY

This is your newsletter so please let me know of content you might like to see. Anyone is welcome to submit articles of your choosing. For example, an observing session report, a field trip or some event, etc.

Clear Skies!

Rich DeMidio

---

*Chase McNiss, Dan Smith, John Pappas, David Gilmore  
(Rags), John Rose*

---