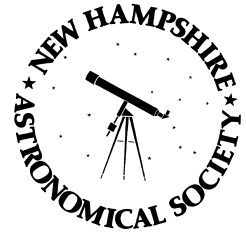


# THE NHAS OBSERVER



Newsletter of the New Hampshire Astronomical Society

Volume 2001 No. 8

"All the news that fits in print"

August 2001

## Home Spectroscopy

For August the evening program will be "Home-Brewed Amateur Spectroscopy" presented by **John Blackwell**. This is not to be confused with Amateur Fundoscopy, which is another use for light but is not fun if done by an amateur.

Topics include:

Why engage in Spectroscopy?

What can an amateur do?

How do you get started?

The program will include a "live" demonstration of the spectrum of hydrogen. Attendees will get to handle a number of transmission gratings as part of the presentation.

John offered the following overview of his program:

"Although taking CCD images is interesting and results in some lovely pictures to hang around the house and to show friends, there is a lot more that an amateur astronomer can do these days. All of the advanced equipment that is now available offers the amateur a whole host of projects to choose from. Spectroscopy is now easily within reach of anyone with a small telescope.

The spectra captured at the Northwood Ridge Observatory were done using telescopes ranging in size from 106 mm to 8 in., a Starlight Xpress MX-5c CCD imager, an SBIG ST-7 and a Rainbow Optics transmission grating. Any good CCD imager will do, and it does not need to be a color imager.

The CCD camera is also optional. The Rainbow Optics unit is meant to be used at the eyepiece, and anyone can find absorption lines in bright stars using this device.

Thus, an amateur can collect spectral data by sketching what is seen at the

eyepiece." - J.A.Blackwell (from <http://www.regulusastro.com/regulus.html>)

### President's Message

The 2001 Stellafane ATM convention takes place in Springfield, Vermont, on August 17 and 18, one week after our business meeting. Information about the event can be found at [www.stellafane.com](http://www.stellafane.com). Please stop by the NHAS tent if you attend.

August 17 is also the night for the YFOS Coffee House. Members who are not going to Stellafane but have completed the YFOS walk through and can properly open and close the site may use it.

We will set up the club tent at Stellafane and members are invited to a cookout on Saturday the 18th. At the club meeting we need to know how many will be attending the cookout so we can provide enough food.

August also brings the Perseid Meteor shower, due to peak on the night of 11th, morning of the 12th. The last quarter moon will interfere somewhat in the early morning hours since moonrise will be at 3:53 am.

★ John Pappas

### Public Observing Highlights

A Skywatch was scheduled on July 25th on Peak's Island, near Portland, Maine for the residents of the island. Clear skies all day closed up by evening and rain started just as the event was about to begin. I met two club members getting off the ferry just as I was getting on the boat to return to the mainland. We may reschedule this skywatch.

The CMP Skywatch on Aug. 3 went head to head with thunder showers and low flying clouds so this past month has been fairly unsuccessful for skywatches.

★ Ed Ting

### YFOS

Mike Stebbins reported the following:

"Chase McNiss repaired the broken wheel on the lawn mower, and I ran it around the warming room a few times before we ran out of gas. The grass on the whole was not really high enough to cut again, so I just hit the spots that were missed previously.

We had over 20 cars at YFOS at the July 20 Coffee House and could have fit a few more. The sky was unsteady until about 10 pm, then got better, but it never really got very dark.

One thing was worth noting. A lot of people brought power cords and ran them to both the observatory and to the warming room, so that there was a tendency to trip on them. We might want to add outside outlets to the south side of the observatory and remove the outlets from the outside of the warming room."

### YFOS Work Session, August 11, 2 pm

We added GFI outlets for observing field onto the observatory, mowed grass, and identified what else needed to be done. People willing to mow please contact [lopez@mv.mv.com](mailto:lopez@mv.mv.com).

★ Larry Lopez

### Feature Story

Peek at the Perseids ..... Page 2

## Peek at the Perseids When They Peak

This year, the maximum meteors per hour for the Perseid (PER) meteor shower falls on August 12th, a weekend! There will be some interference from the last quarter Moon. The peaks will occur at 14 and 17 hours UT (2 pm and 5 pm EDT). This is a real plus for getting friends and family out to see this wonderful show.

These are fast meteors, at about 59 km per second, and often leave trains behind them. There are many bright Perseids, so even from a less than perfect sky location, you can see a respectable number of meteors. For the best effect, try to get out into the country, away from the light pollution of street lights. You will see many more meteors for every extra little bit of dark sky.

At maximum on August 12th, the Perseid radiant will be located about four degrees north of the star gamma Perseus, the middle star of the outstretched right arm of Perseus. The Zenithal Hourly Rate (ZHR) is about 110 meteors per hour, visible with the unaided eye, if an observer is out under a dark country sky, and if the radiant, the area in the sky where the meteors seem to come from, is directly overhead.

For more information on this and other August meteor showers, go to:

<http://web.infoave.net/~meteorobs>

★ Lew Gramer

## ATM True Grit

An ATM meeting was held July 22. **Paul Norris, Dave Davenport, and Don Ware** attended.

Paul is grinding away at 320 grit and Dave is close to finishing 500 grit. Don and I discussed a lot of things regarding goto mounts and we also picked the following dates for the ATM classes:

August 5, 26  
September 9, 23  
October 7, 21  
November 4

If anyone is interested we could have a field trip to Don in Hollis to check out his home brewed goto mount.

Another ATM meeting was held on August 5 attended by **Paul Norris, Dave Davenport, Don Ware and Ed Dougherty**.

The Tester is working well now.

★ Larry Lopez

## The Bottom Line

As of August 6, the club bank balance is \$7,940. Total 2001 members increased from 141 to 147.

NHAS would like to thank **Daun Smith** for a donation of \$20.00

★ Jim Warena

## Looking Back at Last Month

**Opening Remarks.** **John Pappas** welcomed four new members and visitors, two from Nashua and two who came to CMP skywatches. They also found our website.

**Email.** Received a few e-mails: 1) Dark Sky T-shirt Contest, 2) Nancy Moon; vote against replacing low-sodium lighting in her town (dated June 26th),

3) Club opening "Starfield Observatory" (Astro Society of Northern New England

**Book of the Month.** **Larry Lopez** circulated three books from the library: *Mars at Last*, *The Stargazer's Bible*, and *John Glenn, Memoirs*.

**Committees.** **ATMs:** Two new mirrors started, the crew from last year was continuing at various stages of progress.

**Web Comm:** **Barbara**

**O'Connell** said that Majordomo (a.k.a. [nhas-members@nhastro.com](mailto:nhas-members@nhastro.com)) was still not working; No repair date available.

**Photo Comm:** N/A

**YFOS.** **Joel Harris** was to take the

observatory hand crank off to fit a locking mechanism on it since it was stripping the index wheel. He hoped to return it before the Coffee House on July 20.

**Public Observing.** **Ed**

**Ting** reported on past events. At the June 14 skywatch at Center Woods Elementary in Weare, the high-level of enthusiasm kept it going until 11pm. He listed several skywatches for the coming month including an invitation to attend a skywatch on July 25 on Peak Island, Portland, Maine.

**Stellafane.** August 17th & 18th Stellafane Springfield, VT. Lunch will be organized. **Bert Bingel** will need a nose count to purchase food. The membership was encouraged to bring food to share. **Joel Harris** will bring the club canopy and grill.

**Treasury.** not available

Scope of the Month. not available  
Club Scope: Went to Barbara O'Connell as of July 19.

**Evening Program.** **Bert Bingel** presented his inimitable, irresistible, and controversial exposé of the history and never ending search for Vulcan and the Death Star.



In the photo, Bert shows on page 57 that the Death Star will eventually wreak havoc on the solar system.

★ Michael Frascinella

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>> **DEADLINE FOR SEPT. 2001 ISSUE: 4 PM Sept. 14**<<

E-mail articles to Editor. Call to schedule late submissions.

### CHANGE OF ADDRESS

Notify the Treasurer. Include your full name and new street address.  
If changing an e-mail address, specify whether you want to add, modify, or delete an e-mail address.

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#### Send E-mail to:

[Treasurer@nhastro.com](mailto:Treasurer@nhastro.com)

#### Use our web site:

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

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## NHAS Upcoming Events

## Home-Brewed Spectroscopy, Aug. 10, CMP

Event	Date	Time	Location
August meeting	Aug. 10	7:30 pm	Planetarium, Concord, NH
Coffee House	Aug. 17	dusk	YFOS site
Stellafane Weekend	Aug. 17-18	ongoing	Springfield, Vermont
ATM Meeting	Aug. 26	TBA	Lopez Barn, New Boston, NH
Photo Comm.	TBA	TBA	YFOS site
CMP Skywatch	Sept. 7	<b>7:30 pm</b>	Planetarium, Concord, NH (note new time)
Coffee House	Sept. 14	dusk	YFOS site
Sept. Meeting	Sept. 21	7:30 pm	St. Anselm's College, Goffstown, NH