Observer Staff Editor & Publisher: Michael Frascinella Contributors: Joe Derek, Ed Ting, Barbara O'Connell, Bob Veilleux, Larry Lopez, Bob Sletten, Jim Warenda Marc Stow





June 2003

Volume 2003 No. 6

Newsletter of the New Hampshire Astronomical Society "All the news that fits in print"

# A Clark Refractor – Live!

### **President's Message**

Hello, NHAS Members!

Well, needless to say, May was a month filled with a lot of weather, and not very good weather for observing, if you want my opinion. Fortunately for Astronomy Day at Christa McAuliffe Planetarium, the weather cooperated with plenty of sun.

I want to thank **Barbara O'Connell**, **Dave McDonald**, and others for their contributions in making Astronomy Day a success. Our opportunity to share with the public and to focus on the magnitude of creation as seen from earth looking out can be awe-inspiring and fun.

At our last meeting, **Don Ware** presented the design for the observatory pier for the new mount which should be in our possession shortly. I was amazed at how important the design of the pier is and all the details that need to be taken into account to minimize vibrations. I am sure that all who attended the May meeting will admit that we're in good hands after hearing Don's presentation.

At our next get together, **Bob Veilleux** will be bringing to the meeting and doing a talk on a piece of history -a refractor, and not just any refractor, a "Clark Refractor."

This should be another adventure in Astronomy as we consider the historical workmanship of those who have come before us.

See Bob's note on this page for a hint about his presentation.

Regards,

★ Joe Derek NHAS President 2003

## **Scope of the Month**

The June meeting will feature an unusual Scope of the Month – an 1875 4-inch Alvan Clark refractor. This telescope has been at Central High School for 128 years and is now being given to the Manchester Historic Association.

I thought that it would be of interest to members of the club to see this fine instrument before it is retired as a museum piece.

★ Bob Veilleux

Editor's Note: For interesting reading about another Alvan Clark telescope, go to

http://astro.uchicago.edu/yerkes/virtual museum/40inch.html

### **Astronomy Day Wrapup**

We were blessed with a gorgeous day on May 10th, 2003, Astronomy Day. There were many terrific exhibits put together by our friends at the Christa McAuliffe Planetarium and our own NHAS members.

There was information on light pollution, R.P. Hale's encore of archeoastronomy, and a new exhibit on video astronomy that was very nicely done. Also, members brought a variety scopes to showcase the bevy of amateur astronomy activities, such as astrophotography and radio astronomy.

Inside the planetarium, there was a slide show, a Foucault testing exhibit, and an eclipse photography exhibit to entertain the masses.

Always a favorite on a sunny day was solar observing with both hydrogenalpha and visual filters. Our NHAS President got in on the fun with his Make-n-Take Astrolabe exhibit. There were many hardworking volunteers under the club tent selling NHAS t-shirts and covering exhibits when people needed breaks.

The day was busy, and went by fast. In the evening, we had clear but hazy skies. We held a short skywatch for the remaining people exiting the planetarium shows.

Turnout was great, and was estimated in the hundreds. Luckily, we had many volunteers to keep the public engaged (there we over 25 NHAS volunteers, too many to list in this newsletter, but look online for details).

Overall, I was very pleased with the event and look forward to helping out next year. We'd like to gather any photos that members took of the event and chronicle it on our web site. Please send them to Barbara O'Connell at barbnhas@yahoo.com. My sincerest thanks go to the people who worked hard to make Astronomy Day fun and educational. Great Job, everyone!

> Barbara O'Connell NHAS Astronomy Day 2003 Coordinator



Astronomy Day 2002

Noteworthy News Homemade Dewshields and Weights.....Page 2

#### Homemade Dewshields and Weights

I have fashioned dew shields from Flexi-foam for a number of telescopes. These shields slide nicely over the optical tube assembly (OTA) when not in use, and provide some protection from bumps, too. I recently bought an LX90 that came unbalanced, right out of the box. I wanted to install a counter weight system, but the Flexi-foam dew shield would not fit around most designs, and they were pricey.

Instead, I made my own. I used black plastic utility boxes that Radio Shack sells in a variety of sizes. I mixed lead shot with two-minute epoxy and poured the mixture into each box, while measuring the weight on a small scale.

After the epoxy set, I screwed the lids on and affixed two strips of doublesided foam tape on the long sides of each box and covered them with twoinch wide Velcro. The foam tape provided a contour that made a closer fit to the other part of the Velcro, placed along the underside of the OTA.

When finished, they weighed 1/4 lb., 3/4 lb., and 1 lb. each. They are easy to position and not so easy to dislodge. The 3/4 lb. weight balances the finder scope, diagonal, motorized focus, and a 32 mm eyepiece. The total cost is under \$15, and they look "finished."

★ Marc Stow

#### Public Observing Highlights

Many thanks go out to **Marc Stow**, **Gardiner Gerry**, **John Bishop**, and **Mike Townsend** for showing up at Camp Wicosuta on May 30th in Bristol, NH. About 50 girl scouts attended my slide show before viewing Jupiter and Mizar through holes in the clouds.

Curiously, just as we were breaking our equipment down, the skies cleared up. The camp, it turns out, is a great observing sight. Maybe next year...

★ Ed Ting

#### Web Uploads

With Astronomy Day 2003 completed, the redesign of the NHAS web site comes to the front burner. Look for a project update at the June meeting.

★ Barbara O'Connell

#### Mow YFOS News

The site was mowed on Saturday, May 31st. The grass was really deep around the buildings and it took me as long to mow there as it did to mow the whole observing area and the parking area.

If somebody has a mower that mulches, it would be a good idea to mow again really soon to clean up all the cut grass laying on the ground.

I left a can of gas at YFOS with the mower. The mower started up fairly easily and should start easily for the next person. I did not have a grass trimmer and there is plenty of trimming to do as well.

I stayed for the Coffee House even though it poured just as I was finishing the mowing. There were six of us who showed up, and between 8:30 and 9:00 p.m., it cleared up fairly well. Seeing was poor but we observed until 11:00 p.m. and then started to break down because of all the dew and fog.

Larry Lopez sent mail that he intended to bring a mower on the weekend of June 7-8 and he would appreciate some "mow-ral" support. [Sorry! – Editor]

★ Chase McNiss

#### **ATM True Grit**

Due to being sick with some kind of bug this past week, I would like to reschedule the ATM meeting originally scheduled for June 8. Let's plan on Sunday June 15 instead.

★ Larry Lopez

#### Membership Notes

The Astronomy 101 series of classes is almost completed. So far we have held four of the five planned sessions.

1) "Telescopes" – **Mike** Townsend

2) "Solar System Objects" – **Mike Stebbins** 

3) "Navigating the Night Sky" – **John Pappas** 

4) "Deep Sky Objects" – Alan Shirey

The fifth session will be entitled "Using the Dark Sky Site." This session have to wait until the new 16-inch telescope mount arrives as well as having the 16-inch DOB scope back in service. Both of these improvements are planned for June. The class will likely be offered some time in July.

★ Bob Sletten

#### The Bottom Line

Beginning Balance: \$5958 Accounts Payable: \$3600 (truss mount and Titan mount)

Net Balance: \$2338

2003 members: 163 (unchanged)

#### **Welcome New Members**

NHAS welcomes the following members into our field of view.

Lawrence Jasper	Gilford
Stacey Upham	Manchester
Gary Doody	Hooksett

Welcome back to **Roger Leighton** of Loudon!

★ Jim Warenda

#### Looking Back at Last Month

**Opening. Joe Derek** opened the meeting by welcoming old and new members. We had a light turnout due to the NEAF show in Suffern, N.Y. this weekend.

**Book of the Month.** Joe brought in the *Cambridge Dictionary of Astronomy*.

**Scope of the Month.** Joe also showed us a 4-inch f/6.5 Apogee refractor on a GEM mount. He purchased it at NEAF last year for only \$350.00. One thing that attracted him was the powder blue paint job. (A good color for an Astronomy Day t-shirt.)



#### June 2003

The NHAS Observer

**Public Observing. Ed Ting** stated he had added some skywatch dates for the coming month.

May 30 was for the Girl Scouts at Bristol, NH. July 3rd was for the Eastman Recreation Center near Lebanon, NH.

#### Astronomy Day Wrap-up. Barbara

**O'Connell** said we tried a different set up and location and had mixed results but it was a good day overall.

**Committees.** <u>Web:</u> **Barbara** noted that not much has changed, but the web calendar is being updated.

**YFOS.** Notify **Larry Lopez** if interested in helping with mowing the grounds. [Does anyone have a few spare sheep? –Editor]

**Don Ware** talked at length about the observatory pier [and about the length of the pier too]. The design requirements incorporated the need to be able to look into the eyepiece from floor level. CAD software was used to create a 3D model of the scope, Titan, mount, and observatory building.

Don competently presented details on the design and assembly of the massive steel pedestal that is to be fastened to the existing concrete pier. One of his contacts was donating the hefty steel tubing for the pedestal.



**Treasury. Jim Warenda** reported a balance of \$2333 with a few accounts payable. Membership was at 163. He has a lot of NHAS t-shirts left over from A-Day so be sure to get one at the next meeting on June 13.

#### **Evening Program. Joe Derek** presented a beautiful set of deep sky slides of objects in the southern hemisphere taken by the Southern European Observatory in Chile. Some photos were amazing in that they contained nothing but galaxies.

A second slide set of commercial slides of the Northern Hemisphere was used to play "Guess That Constellation." This was rather challenging since the background stars were so thick that it took a little while to pick out the constellation stars.

★ Michael Frascinella

The one stop shop for all of your astronomical product needs CAMERA



SHOP

454 Central Ave Dover, NH 03820 69 North Main St. Rochester, NH 03867 742-4888 332-5652

<b>DEADLINE for July 2003 Issue: 5 PM June 28</b> E-mail your articles to the Editor. Phone if you have a late submission. <b>CHANGE OF ADDRESS</b> 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.	How to Join N.H.A.S. Write to us: NHAS P.O. Box 5823 Manchester, NH 03108-5823 Attn: Treasurer 2003 Officers President:: Joe Derek Vice Pres.: Todd Miller Treasurer: Jim Warenda Secretary: Michael Frascinella
---	--

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

# NHAS Upcoming Events

# Alvan Clark Scope, June 13, CMP

Send E-mail to: info@nhastro.com

Use our web site: http://www.nhastro.com/

8 7:30 p.m.	Planetarium, Concord, NH How many strawberries fit on a C102HD dustcap?
Ļ	How many strawberries fit on a C102HD dustcan?
′ dusk	YFOS
	Don't observe downwind from fireworks.
7:30 p.m.	St. Anselm's College, Goffstown, NH