The Celestial Observer

Newsletter of the North Shore Amateur Astronomy Club

April, 2009

From the President

The 20th Anniversary Celebration is only a few weeks away. I have an updated menu that offers a Complete Buffet Dinner prepared by the Chateau Restaurant (website: www.ChateauRestaurant.com). The Dinner menu is:

Buffet Garden Salad
Toasted Ravioli with Meat Sauce (Pasta)
Eggplant Parmigiana (Entrée)
Chicken Cacciatore over Penne (Entrée)
Italian Green Beans
Misc. Desserts from NSAAC Members

Date:	Saturday April 4, 2009
Location:	Veasey Memorial Park, Pingree Hall
Time:	Arrive 6:30 for punch and appetizers
	Buffet style dinner starts at 7 PM

Please remember to send in photos of club members/events or astrophotos to club officers so that we can use these to decorate the room.

We will be asking people to confirm that they are planning to attend (NSAAC List server and phone calls to those without access to the list server). Estimated number of people is 80. We need a firm headcount by April 1.

I am looking forward to the evening and hope to see you there.

If you have questions or comments email me: jefoy at comcast.net.

James Foy,
President

Your 2008 and 2009 Board of Directors. L to R are: new Member at Large Dan Smoody, outgoing Membership Director Theresa Earle, Secretary John Hobbs, President Jim Foy, Member at Large Bill Drown, Vice-President Tom Rauschenbach, Treasurer Kevin Ackert, and Membership Director Jim Bastable.

Minutes of the NSAAC Business Meeting, March 6th, 2009

President Foy called the March Business Meeting of the NSAAC to order at 8:08 PM. There were 15 members present plus 7 Board members. There was an official quorum.

Secretary: The Minutes of the February business meeting were approved by acclamation.

Elections:
Nomination Committee Chairman, Dan Smoody announced the slate of candidates for officers for the club for the 2009-2010 fiscal year:

President- James Foy
Vice President- Thomas Rauschenbach
Treasurer- Kevin Ackert
Secretary- John Hobbs
Membership Director- Jim Bastable
Member at Large- Dan Smoody
Member at Large- Bill Drown

There were no nominations from the floor
The slate was elected by acclamation.

Treasurer:
Treasurer gave an abbreviated report. We are solvent. The treasurer will give the end of the fiscal year report at the next business. Treasure has updated the member information form including renewals.

Membership:

There were no new members since the last business meeting,

Early Meeting Announcements:
Open forum on the agenda after New Business

Committee Reports:

Young Astronomers Program:
There is not much activity on the website. The board will start calling the schools and prod them along. A motion was made and seconded that the club spend up to $2,000 for the YAP program.

Merrimack College:
The observatory is open and fully staffed. Visitors have been good when the weather has cooperated.

Salem State:
The scope has been installed and just waiting for good weather.

Star Party Committee:
The upcoming star parties are:

- Thursday, March 12th, Salem Science night, Witchcraft Heights Elementary School, Salem, MA
- Friday, March 13th, Elementary School, Amesbury, MA
- Saturday, March 21st, IRWS, Topsfield, MA, Gary Meehan, Chandra
- Thursday, April 2nd, Cub Scout star party, Topsfield, MA
- Monday, April 13th, High Plains Elementary School, Andover, MA ATmoB, rain date 15th
- Thursday, April 16th, Oakland Park Ave Elementary School, Methuen
- Friday, April 17th, rain date Saturday, April 18th, Chelmsford Conservation Trust
- Saturday, May 2, IRWS, Topsfield, MA, Gary Meehan,
- August 6th, Peabody Institute Library, Danvers, MA

Telescope Clinic:
Chuck Larrabee found our telescope clinic on the internet and asked for help with his Tasco 3.5" Reflector. Kevin Ackert and Bill Drown assisted in getting him started.

News, Correspondence and Upcoming Activities:

Old Business:
We currently have 106 members in good standing,

John Tulik has renewed the dark park permit and we will make copies when it is received.

New Business:

There was a request from the management of VMP for helping with the spring clean-up. Kevin suggested that we contract Megan to see if she has any special work for members of the club such as painting, roofing, or wall-boarding. Members who don't want to participate in the special work can volunteer for this spring work around April 18th.

International Year of Astronomy is taking place in 2009 and is a global event initiated by the International Astronomical Union and UNESCO to help the citizens of the world to rediscover their place in the universe. For more information see the website: http://www.astronomy2009.org/. The club needs to make some effort for this event and any ideas are welcome and should be sent to President Jim Foy. Jim Foy would like to have a party at Dark Park with the combined NSAAC and the GAAC club. The club will also set up star parties for the public at our other venues.

The President reviewed the schedule for the 20th anniversary celebration. The schedule was presented in the last newsletter and is repeated here:
4-6: PM decorate and set-up Pingree Hall at VMP
6:30-7 PM Arrive
7 PM Welcome remarks (5 min)
7-8:30 PM Dinner
8:30-9 PM Comedy show and desert
NSAAC History
Tony Costanzo Music

Entertainment for the evening was a program on daylight imaging or Mercury by member John Boudreau.

Board meeting is scheduled for Monday March 16th at 7:30 PM.

Meeting adjourned at 8:49 PM.

Respectively submitted,
John Hobbs, Secretary NSAAC

Treasurer's Report

Welcome to NSAAC Fiscal Year 2010!

Our membership status as of this printing is thirty-four (34) in good standing which includes one (1) Associate and one (1) Honorary, and seventy two (72) with dues due. Please continue your support of astronomy through the NSAAC by renewing your membership today!

If none of your information has changed, there is no need to submit a Member Information Form, just mail the check to the address below. If your information has changed please

download a Member Information Form from our website and submit it along with your payment. Electronic submission of dues via our website is still in the plans, but is not yet functional.

PLEASE NOTE, THERE IS NO LONGER A LATE FEE. The dues are $20.00 per year. Any money paid over that amount (and not earmarked otherwise) will go to general donations.

Members attending the 20th Anniversary Celebration on April 4th are asked to have their membership in good standing. Dues payments will be accepted at the celebration.

Magazine Subscriptions:

If you already receive *Sky & Telescope* and your renewal form says $32.95, then you are already receiving the club discount. You should renew by sending your form and check directly to S & T. If your renewal form says $42.95, then you are NOT receiving the club discount. Send the renewal form and a check for $32.95 made out to Sky Publishing to me. I will then forward to S & T along with membership confirmation. Once a year S & T sends me a list of members who are receiving the discount for confirmation.

For *Astronomy* magazine, subscriptions are $34.00 for one year and $60.00 for two. Send your renewal form and check (made out to Astronomy Magazine) to me, not directly to the publisher.

Send treasurer mail to:

North Shore Amateur Astronomy Club
Attention: Treasurer
c/o Veasey Memorial Park
201 Washington St.
Groveland, MA 01834-2007

Kevin Ackert,
Treasurer

Star Party News

The star party season is getting under way with ten star parties scheduled between now and May. We really need volunteers for these events. Let's hope that we will have clear skies for these events.

The February star party for a Boy Scout troop at the Steward School in Topsfield was cancelled because of weather and we are working on rescheduling it for the spring.

See the minutes of the March business meeting for the list of upcoming star parties.

The Star Party Committee would like to thank all the members who have supported our star party effort and look forward to your participation in the coming months.

John Hobbs,
Star Party Coordinator

NSAAC Annual Picnic – Save The Date

The 2009 Annual Club Picnic will be held a Kevin Ackert's house in Billerica on Saturday, July 18, rain date Sunday, July 19 . Bring towel and bathing trunks if you want to jump in the pool. We'll have burgers, hot dogs, salads and non-alcohol drinks. Feel free to bring something if you'd like. Solar observing from the driveway and games in the back yard. I'll need a head count to estimate how much food and drink should be purchased, so please let me know as soon as you know if you're coming.

Kevin Ackert

Astrotalk

by Barrie Sawyer

Mauna Kea

Its summit is "wao akua": the realm of the gods and goddesses. It is first born of the Earth Mother and Sky Father and is the holiest site in the Hawaiian Islands to its native peoples. The dormant volcano has two other distinctions. Measured from its base on the seafloor to its summit, Mauna Kea is the tallest mountain on Earth. It is also home to the greatest astronomical observatory site on the planet. Thirteen of the largest, most sophisticated telescopes ever conceived adorn the top. They include Keck I and Keck II, the largest optical wavelength telescopes in the world. Here are some interesting facts about them:

- Each cost $75 million dollars compared to the approximately $2 billion for the Hubble Space Telescope.
- They came in on time and under budget.
- The mirrors are a whopping 10 meters (33 feet) in diameter.
- They deviate in their ideal shape by no more than 1/millionth of an inch. This is done by making the mirror out off 36 individual hexagonal sections that are kept in shape by computer controlled pistons on the back of each segment adjusting them several times a second.

- The movable part of the telescope weighs 300 tons. They move over oil pressure bearings that allow it to be moved with just one hand.
- Both telescopes can be used separately or as conjoined scope (called an interferometer).
- Mauna Kea is notable for its steady air and dark skies -- so dark that the Milky Way casts a shadow.
- One of the few mistakes they made in building Keck I was to position the loading docks on the north side. They fill up with snow every time there is a storm.
- The next big scope, the Thirty Meter Telescope, will be modeled after the Keck scopes. It will have a 30 meter wide mirror (100 ft!) and is scheduled for first light in ten years.
- The Keck scopes use adaptive optics to counter air turbulence. This requires having a reference star near to the target object. If no bright star is nearby then they use a fifteen watt laser to create an artificial one about 55 miles up by exciting sodium atoms. The sodium comes from meteors.
- When the laser is running, two people have to monitor the sky for aircraft and satellites.

I read an interesting perspective on one project. Earth, for the first time in 4.5 billion years, in the form of the human is developing a planetary immune system. Sky surveys on Mauna Kea are currently trying to find all major Earth crossing asteroids and comets.

It was worth the bad case of altitude sickness to visit Mauna Kea. My companions assured me I was not hallucinating when on the way down I saw someone at 12,000 ft. heading up to the summit… on a bicycle!

Clear skies,
Barrie (barrie_sawyer at yahoo.com)

Telescope Clinic

Members are reminded that the club conducts a Telescope Clinic once a month prior to our business meeting. Members and the public wishing to receive help with a new telescope, or repair of an instrument, are welcomed. Advance notice that you would like to have a clinic is required as we do not show up early for this unless we know someone is coming. Read more about the Telescope Clinic at http://www.nsaac.org/clinic.shtml.

Getting to Veasey Memorial Park

From Interstate 95 north, take the Route 133 west (54B) exit, and follow it into Georgetown Center. Go straight through the light, now on Route 97N. Go about 1.5 miles and take a left onto Salem Street (Tea Garden Restaurant at this intersection). Stay on Salem Street and turn left onto Washington Street. VMP is down a bit on the right.

Directions to all of the NSAAC observing sites are available on our web site's "About" page at:
http://www.nsaac.org/about.htm

Contact Information

For more information about the club and its activities, contact Therese Earle, Membership Director, email: membership at nsaac.org or contact Jim Foy, President, e-mail president at nsaac.org.

Our club web site is: http://www.nsaac.org.

The *Celestial Observer* is edited by Leor Zolman. Feedback, and member contributions are welcome. Contact: newsletter at nsaac.org.

Chuck Larrabee found our telescope clinic on the internet and asked for help with his Tasco 3.5 Reflector which he received as a gift from Raytheon for thirty years of employment there. L to R are Bill Drown, Jim Bastable, Chuck Larrabee, and Tom Rauschenbach. These members along with Kevin Ackert enabled Chuck to begin enjoying his new instrument.