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# The Celestial Observer

*Newsletter of the North Shore  
Amateur Astronomy Club*

**May, 2010**

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## **From the President**

The May 7<sup>th</sup> NSAAC business meeting will change to the new venue below:

- 6:30 PM to 7:30 PM Chinese buffer dinner at the China Blossom restaurant for those members that chose to attend (\$18.95 + tip/person).
- Drive to Veasey (10 to 15 minutes)
- 8:00 to 9:00 PM Presentation (Veasey Memorial Hall-Pingree meeting room) by Michael Deneen on "Exoplanets" plus a question and answer session
- 9:00 PM to 9:20 PM monthly NSAAC business meeting
- Refreshments

For the latest information on the speakers and topics go to this link on our website:

[http://www.nsaac.org/joomla/index.php?option=com\\_eventlist&view=eventlist&Itemid=66](http://www.nsaac.org/joomla/index.php?option=com_eventlist&view=eventlist&Itemid=66)

I hope that bringing in speakers, plus reducing the time spent on NSAAC business meetings, will increase attendance at our monthly meetings. I would also like to get NSAAC members involved by giving a presentation.

This month, our speaker is Michael Deneen, who is a long term member of NSAAC, President for 2 years and current webmaster. Please join us for dinner at the China Blossom for a discussion of astronomy with Michael plus the opportunity to talk with other NSAAC members. China Blossom restaurant is located at Route 125, 946 Osgood Street, North Andover (website: <http://www.chinablossom.com/>). If you plan to attend the dinner, please send me an email. I hope to see you at the restaurant and business meeting!

I am happy to report that the elections of NSAAC Officers and Members at Large for 2010 were completed at the April

business meeting. The following are the NSAAC Officers and Members at Large:

President—Jim Foy  
Vice-President—Bill Drown  
Treasurer—Kevin Ackert  
Secretary—John Hobbs  
Membership Director—Jim Bastable  
Member at Large—Dan Smoody  
Member at Large—Ron Sampson

April is a busy month for our public outreach mission. Friday, April 23<sup>rd</sup> NSAAC and GAAC are sponsoring a joint public star party at Halibut State Park to continue the celebration of the International Year of Astronomy from 2009 into 2010. NSAAC volunteers with telescopes are needed to help.

Astronomy Day is Saturday, April 24<sup>th</sup>. We start the day (afternoon-exact times announced on website and via email) by awarding the winners of the Young Astronomers Program with telescopes, binoculars, books and a free NSAAC membership. Then, we have a presentation at Ipswich River Wildlife Sanctuary, "Comet Tails" by Gary Meehan, from 8:00 to 9:00 PM. So far, 17 people have signed up and NSAAC volunteers are needed to help with the observation session that starts at 9:00 PM.

This year you can renew your membership via an electronic renewal form and Paypal. Go to the following links on our website:

[http://www.nsaac.org/joomla/index.php?option=com\\_mad4joomla&jid=1&Itemid=54](http://www.nsaac.org/joomla/index.php?option=com_mad4joomla&jid=1&Itemid=54) (electronic membership form)

[http://www.nsaac.org/joomla/index.php?option=com\\_content&view=article&id=56&Itemid=63](http://www.nsaac.org/joomla/index.php?option=com_content&view=article&id=56&Itemid=63) (Paypal).

If you have questions or comments email me: [jefoy@comcast.net](mailto:jefoy@comcast.net).

*James Foy,  
President*

## **NSAAC Welcomes Our New Member:**

Bryan D. Stone of North Andover, MA

*Jim Bastable,  
Membership Director*

## **Minutes of the NSAAC Business Meeting, April 2<sup>nd</sup>, 2010**

Vice-President Drown called the April Business Meeting of the NSAAC to order at 8:20 PM. There were 6 members present plus 6 Board members. There was an official quorum.

### Secretary:

The minutes of February and March business meeting were approved by acclamation.

### Treasurer:

No Report

### Membership:

There was one new member, Bryan Stone.

### Early Meeting Announcements:

Open forum on the agenda after New Business

### Committee Reports:

#### Young Astronomers Program:

The four telescopes have been ordered. We have received 7 applications for the YAP program. Tony Costanzo brought the 4<sup>th</sup> scope which Ron Sampson has taken home.

#### Merrimack College:

Merrimack had two good days. A school group of 12 opened the observatory one evening and 8 or 10 people came a second night. No change in the lock situation; the security police have been very good about coming quickly to lock up.

#### Salem State:

Salem open 1 night with 9 students from the college; none from the astronomy course.

#### Star Party Committee:

The upcoming star parties are:

Friday, April 23<sup>rd</sup>, GAAC and NSAAC combined star party at Halibut Point State Park, rain date Saturday, April 24<sup>th</sup>. If April 23<sup>rd</sup> works out, then there will be guerilla astronomy on Gloucester waterfront.

Friday, April 24<sup>th</sup>, IRWS Topsfield MA with Gary Meehan giving a talk

Wednesday, May 5<sup>th</sup>, Trahan School, Tewksbury, MA, rain date, Wednesday, May 26<sup>th</sup>

Wednesday, April 28<sup>th</sup>, Harrington School, Chelmsford, MA; rain date, Thursday April 29<sup>th</sup>

Tuesday, June 29<sup>th</sup>, Wenham Public Library, Wenham, MA, rain date, Thursday, July 1<sup>st</sup>

Request from Chelmsford Land Trust for star party in June

### Telescope Clinic:

No involvement.

### News, Correspondence and Upcoming Activities:

No information

### Old Business:

Elections: Nominating chairman, Pat Amoroso, announced the list of candidates for club officers. The slate of candidates is:

President—Jim Foy

Vice-President—Bill Drown

Treasurer—Kevin Ackert

Secretary—John Hobbs

Membership Director—Jim Bastable

The floor was opened for any other nominations. There were no nominations from the floor. The slate of candidates was approved by unanimously.

The slate for the Members at Large was:

Member at Large—Dan Smoody

Member at Large—Ron Sampson

There were no nominations from the floor. The two Members at Large were approved unanimously.

John Tulick has renewed the clubs permit to use the dark park for the coming year. He has sent an electronic copy to Jim Foy. Members that would like to use the dark park should request a permit from Jim Foy or Kevin Ackert via email.

### New Business:

Jim Foy has asked that members be reminded that after observing at Veasey, that the last person leaving turn the walkway lights back on. They do not come back on automatically.

Dennis Gudzevich has suggested that we should have the date of the next meeting at the top of the newsletter so that people know about it, similar to what the ATMObBs do.

Astronomy day is April 24<sup>th</sup> and there are several events going on. On Friday night the 23<sup>rd</sup> there will be a combined GAAC and NSAAC star party at Halibut Point State Park with a rain date of the 24<sup>th</sup>. If the 24<sup>th</sup> works out for the star party there will be guerilla astronomy on the Gloucester waterfront. Very important is the YAP program at Veasey on Saturday afternoon when the telescopes will be awarded.

The next astrophotography class on DSLR's will be April 27<sup>th</sup>, 7-9 PM at VMP. Jim Foy will put out an announcement on the list server and ask for people who plan to attend to email him.

May business meeting:

6:30 PM speaker and NSAAC members meet at China Blossom Restaurant for Chinese buffet

President will send email asking for people to sign-up for Chinese buffet about one week before the meeting.

Business meeting at Veasey starts with Presentation (8 to 9 PM)

Speaker: Michael Deneen

Topic: Exoplanets

Brief business meeting 9:00 to 9:20 PM

Refreshments

President Foy indicated that he has put two young astronomers nights on the calendar due to the bad Weather so that we can have alternate dates. He will use the list server to indicate whether or not the event will take place.

President asked for more pictures to be sent in for the newsletter and the website.

Because of the excellent weather for a change the entertainment for the evening was outdoor observing.

Board Meeting is set for Monday April 12<sup>th</sup> 7:30 PM. at VMP

Meeting adjourned at 8:40 PM.

*Respectively submitted,*

*John Hobbs, Secretary NSAAC*

## 2010 Membership Dues

At the time of this printing there are 46 members who have not yet paid their 2010 dues and are now past due. Unpaid members will receive renewal reminders during April and May. Membership status will be changed to "Former Member" following the June board of directors meeting. Paying your dues is now easier than ever via PayPal. Click the link below to be taken to the PayPal payment page for NSAAC.

To pay your dues via PayPal, go to this page:

<http://www.nsaac.org/joomla/>

and click on the "Use PayPal for Dues or Donation" link at the top-left.

- Membership dues for 2009 are \$20.00
- If you joined the club after October 31, 2009, your dues are not due until March of 2011. If you are

unsure of when you joined and whether you owe, check with me before paying.

- **If none of your information or club options have changed, you do not need to include a renewal form with payment.** If your information has changed, please download a renewal form from our website.
- If you pay with cash at a meeting, attach a note to your check with your name on it, or, write your name on the bill. Cash payments with no name attached will not be accepted.
- If you send your payment via US Mail, the address is NSAAC, c/o Veasey Memorial Park, 201 Washington St., Groveland, MA 01834-2007
- Questions about your dues can be sent to [treasurer at nsaac.org](mailto:treasurer@nsaac.org)

*Kevin Ackert,  
Treasurer*

## Young Astronomer Program

The deadline is past and we have received seven essays. We have four telescopes and \$624.00 left in the YAP budget. The board meeting is Monday night and we will be making decisions for the awards at that time.

The YAP program has matured from having two participants the first year, to over fifty schools and seven applicants this year. We have schools that have requested star parties because of YAP, and YAP participants who learned of the program at a star party. We are now out of the learning curve and the years of growing pains. Next year's program will require outside funding and we'll be seeking grants for it during the summer and fall.

This year's contestants include a girl (9) from Lynnfield, a boy (11) from Framingham, a boy (10) from Lawrence, a boy (9) from North Hampton, NH, a girl (12) from Lawrence, a boy (10) from Ipswich, and a boy (9) from Andover. Interestingly, two of the children are home schooled. Several of them have attended star parties at schools, one learned of us from one of Gary's presentations at IRWS, and one is a regular attendee at the Merrimack College Observatory.

The scopes have not yet been assembled. We need a few volunteers to help with the program on YAP day, which is April 24<sup>th</sup> at Veasey Memorial Park. Please contact me if you are able and willing to help out.

*Kevin Ackert*

## Star Party News

Star Party season is in full swing with schools calling to set up events. The star party for the A. B. Bruce School in Lawrence was postponed to the rain date due to clouds. The rain date was Monday March 15<sup>th</sup> and Jim Foy and Jim Bastable participated. They had a few students, two principals, some teachers, some parents, and a few walk-ins from the street.

See the minutes of the April business meeting for the list of up coming 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 continued participation in the coming months.

*John Hobbs,  
Star Party Coordinator*

# DSLR Astrophotography

by Jim Foy

## Photographs of Star Trails

To get a good photo of star trails, such as the photo shown below, takes a combination of experimentation to learn the signal to noise properties of your camera plus software capable of overlaying several images to make a single image.



Exposure: 8 min, ISO400, F2.8 combined 6 images

Equipment needed is a DSLR camera, tripod and a remote method of opening the shutter that minimizes vibrations.

Then pick a location that has a scenic foreground such as trees or a pond. Frame the shot by centering on Polaris. Then experiment with different shutter times, aperture, and ISO settings. A suggested starting point is ISO 800, 5 minute exposure at an aperture setting that is stopped down two levels below full open (the actual number depends on your camera).

Take a single photo and examine the results. Adjust the settings as needed until the stars are bright, the foreground is not the brightest part of the photo and noise from the camera is minimized. Camera noise will result in a grainy photo that detracts from the quality. Once the best settings are obtained, then take several sub photos (5 min sub-exposure X 24 exposures = 2 hours total time) for a total exposure time of about 2 hours. I also recommend taking five dark frames (with lens cap covering the lens) at the exact same settings.

Next month I will talk about combining these photos with Photoshop.

## 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 James Bastable, Membership Director, email: [membership at nsaac.org](mailto:membership@nsaac.org) or Jim Foy, President, e-mail [president at nsaac.org](mailto:president@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](mailto:newsletter@nsaac.org).

Suggestions regarding the content of the NSAAC web site are always welcome; Please email [webmaster at nsaac.org](mailto:webmaster@nsaac.org) with your ideas.



Kevin Ackert and Dan Smoody at Starport. Watch the list server for opening in May for the new moon weekend!