

August Astronomy in the Eastern Woodlands

Ever since my first flying telescope visited New England I've been jazzed about joining the gatherings of 'scope nuts in far off places. "Corvus", my 40 lb ten incher, paid a visit to our nation's oldest and largest telescope convention in '94, while Jupiter's cometary impacts were still dramatically visible. This event, dubbed "Stellafane" by the designer of Mt Palomar Observatory, taught me that not every telescope maker is a telescope user. I had to keep reminding myself that the long, cold nights of mainland winters favor shop projects and freeze out observers. Summer is warm but the sky is generally hazy and thick with mosquitoes. Planets and the Moon drag themselves through the trees in summer months, and tall trees seem always

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Upcoming Star Parties

Club Party	Oct 6	Dillingham
Public Party	Oct 13	Dillingham
Public Party	Oct 20	Kahala/Waikele
Club Party	Nov 3	Dillingham
Public Party	Nov 10	Dillingham
Public Party	Nov 17	Kahala/Waikele
Public Party	Dec 1	Dillingham

Upcoming Events:

- The next meeting is at 7:30 p.m. on **Tuesday, Oct 2nd** at the Bishop Museum.
- Bishop Museum's next planetarium show with **Barry Peckham** is Friday, **Oct 5th** at 7:00 pm.

President's Message

For thousands of years, perhaps hundreds of thousands, humans looked up at the sky in wonder. Birds flew, but we could not, and we could only observe and imagine. More recently, we gained the ability to look farther afield with telescopes and even fly through the air. We learned that planets were not gods and that stars were like the Sun, but we still couldn't get there. Then, 50 years ago, everything changed.

On October 4, 1957, the Soviet Union launched the first artificial satellite to orbit the Earth. The space age had begun. Less than a dozen years later, American astronauts landed on the Moon. The sky was no longer the limit.

Many advances have taken place in the past 50 years, both in exploration and in understanding of our universe. Spacecraft have visited all the major planets of our solar system as well as several asteroids and comets, and more are en route at this moment. Telescopes have increased in size and number, and we have added many more "creatures", such as quasars and pulsars, to the cosmic zoo.

Our explorations have been mostly robotic since the Apollo program ended, but we are poised to return humans to the Moon and continue on to Mars. In the meantime, Japan has just launched a satellite to orbit the Moon. India and China also have lunar missions planned, and the U.S. will send the Lunar Reconnaissance Orbiter next year.

Beyond our solar system, untold numbers of other worlds beckon. We know that the universe is immensely large, but there is one dimension that is even more powerful than distance: time. Given enough time, one can travel any distance. Once we achieve the ability to travel to other star systems, there will be no limit to our explorations. Until then, we can look back in wonder and satisfaction at how much we have accomplished in such a short time.

Chris

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The Astronomer is the monthly newsletter of the Hawaiian Astronomical Society. Some of the contents may be copyrighted. We request that authors and artists be given credit for their work. Contributions are welcome. Send them to the Editor via e-mail. The deadline is the 15th of each month. We are not responsible for unsolicited artwork.

Planets Close To the Moon

Times are Hawaii Standard Time










Other Events of Interest

Times are Hawaii Standard Time

- Oct 2, 10h, M 4.7° N of Mars
(97° from sun in morning sky)
- Oct 6, 20h, M 3.1° NNE of Venus
(44° from sun in morning sky)
- Oct 7, 05h, M 1.1° SSW of Saturn
(40° from sun in morning sky)
- Oct 12, 14h, M 1.2° SSW of Mercury
(20° from sun in evening sky)
- Oct 15, 19h, M 5.3° S of Jupiter
(54° from sun in evening sky)
- Oct 20, 18h, M 1.2° SSE of Neptune
(112° from sun in evening sky)
- Oct 22, 15h, M 1.6° NNW of Uranus
(136° from sun in evening sky)
- Oct 30, 10h, M 3.2° N of Mars
(116° from sun in morning sky)

- Oct 10, 19:01h, Moon New
- Oct 14, 08h, Venus 2.9° SSW of Saturn
(46° from sun in morning sky.)
- Oct 21, Orionid Meteors
- Oct 23, 14h, Mercury at inferior conjunction with sun
(passes into morning sky)
- Oct 25, 18:52h, Moon Full
- Oct 28, 05h, Venus greatest elongation
(46.5° west of the sun in morning sky)
- Sep 29, 06h, Mercury greatest elongation
(26° East of the Sun)

Planets in October

<p> Mercury</p> <p>continues an evening apparition during the first half of October, but it's a poor one for northern observers.</p>	<p> Venus</p> <p>dominates the morning sky, reaching greatest elongation of 46.5° on October 28.</p>	<p> Mars</p> <p>is brightening dramatically this month, reaching a magnitude -0.6 and a diameter of 12" by Halloween</p>
<p> Jupiter</p> <p>is low in the southwest at dusk and sets about a couple of hours after the sun.</p>	<p> Saturn</p> <p>is near Venus in the morning sky. Look for their closest approach on Oct. 14.</p>	<p> Uranus</p> <p>is ideally placed for evening viewing this month in Aquarius.</p>
<p> Neptune</p> <p>is also nicely placed for evening viewing in October in the constellation of Capricornus.</p>	<p> Dwarf Planet Pluto</p> <p>is getting too close to the sun for easy observing in October. It is low in the southwest at sunset.</p>	<p> Dwarf Planet Ceres</p> <p>rises about 8:00 pm and can be viewed by 10:00 pm near the Taurus/Cetus border. At mag. 7.0 it should be fairly easy to find.</p>

President Chris Peterson called the September 4, 2007 meeting of the Hawaiian Astronomical Society to order at 7:40 p.m. The meeting was held at the Atherton Halau of the Bishop Museum. In attendance were twenty-six members and three visitors.

Hawaii Space Lecture Series- This month, the Hawaii Space Lecture Series will take place on Thursday, September 27, 2007 at 7:30 p.m., at the NASA Pacific Regional Planetary Data Center, room 544 of the POST Bldg, at the University of Hawaii. Dr. David Tholen, astronomer with the Institute for Astronomy, University of Hawai'i will speak on "The Hayabusa Mission to Asteroid Itokawa." For further information you can contact NASA PRPDC at 808-056-3132 or on the Web go to <http://www.higp.hawaii.edu/prpdc>.

Lunar Eclipse – Eleven astronomers of the Hawaiian Astronomical Society contributed to the success of the recent activities at the Bishop Museum. Monday evening, August 27th and into the early hours of August 28th, the astronomers shared the views of the spectacular lunar eclipse with the 600+ people who attended the activities on the grounds of the Bishop Museum. H.A.S. president and planetary geologist, Chris Peterson, was one of three lecturers on hand to explain and illustrate celestial events to interested individuals.

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General Information- H.A.S. President, Chris Peterson gave a brief

explanation of current missions in the news. The Messenger Mission will be making its closest pass to the Sun this week. The Venus Express, the European Space Agency the first probe dedicated to studying our neighbor planet, will focus on the planet's unique atmosphere.

Chris Peterson also related that the Phoenix Mission seems to be moving along smoothly. The mission designed to measure the effects of liquid water on the chemistry and mineralogy of Martian soil, thereby increasing our understanding of the history of the ice on that frigid planet. In the mean time, the beautifully over-achieving Mars rovers are again powering up again after the extended Martian dust storms.

NASA's Dawn spacecraft's blast off, slated for August, has been pushed back to September 26th. The mission intends to orbit around two different asteroids.

Interesting Views – Mars will be a delightful sight in the late evening sky in September. Later this year viewing will be earlier in the evening, with Mars reaching opposition close to Christmas and surface features becoming clearer now that dust storms have subsided.

Star Party Report – Forrest Luke reports that H.A.S. astronomers will again share the night skies with O'ahu school students beginning Friday, September 21st, at Kapolei Middle School. In October, Kamehameha School Fourth Graders will be entertained on the grounds of Camp Erdman. And we will soon begin sign-ups for the annual Lacey Veach Day at

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Eastern Woodlands (Continued from page 1) to bully the viewing options. Even without the curse of light pollution, the Northeastern U.S. is no paradise for stargazers.

Yet stargazers can be found there, and they find enough good nights to keep at it. "Sky & Telescope" is published in New England, not far from Perceival Lowell's home town, and a long-standing culture of astro-consciousness nurtures the contemporary practitioners. Somewhere in Pennsylvania, double-star observer Sissy Haas savors color and brightness comparisons, later sharing with the rest of us. Somewhere else in Pennsylvania, I met up with 5 friends from the Delaware Valley Amateur Astronomers. It is a bit of a drive from my RI hometown but well worth the effort to be

among those who love telescopes and know what to do with them. Mirror makers Marilyn Michalski, Bob Midiri and Vince Sheetz gathered for dinner at Marilyn's with Litebox/Midiri mirror owner Jim Hoffman and veteran observer/light pollution fighter Barry Johnson. From there we drove in a car caravan for half an hour along maze-like rural Pennsylvania roads. On one of the longer stretches we drove straight at a sundog. Trees would have hidden it if we weren't pointed right at it. More tall trees surrounded our viewing field, which served as a target range during daylight hours. Big bore ordinance shocked our ears well into the twilight, but eventually the field

was ours. Vince and Marilyn quickly set up their home-built 10 inchers, Barry readied an 8" SCT, Jim and I assembled our 12.5" truss dobos and Bob played with a small go-to scope like a cat with a June bug.

A mostly clear, somewhat hazy sky promised us plenty of targets, but best of all was something I hadn't seen in several decades: fire flies! Across the



From left to right: Jim Hoffman, Vince Sheetz, Bob Midiri, Marilyn Michalski and Barry Johnson

field, among the trees and high overhead, little greenish streaks of bioluminescence danced in mid-air, no one light lasting longer than a second. The spectacle gave a new, magical twist to my enjoyment of nocturnal skywatching. Likewise, a symphony of crickets provided a sound track so different from the surf sounds of Dillingham Airfield. What we were spared on this night was the stench of skunk. Astronomers and skunks often try to occupy the same territory at the same time of day. Guess who suffers more? The recurrent bonus for stargazers like us is the way each setting sun leads us home again: home to the visible uni-

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Eastern Woodlands (Continued from page 4)

verse, to the familiar star patterns, family of planets, guardian moon, and telescopic gems we've learned to find. Across the darkened target range, Barry and Jim tweaked the biggest scope, while Marilyn worked her observing list and her beloved scope "Emerald". Wise Vince swept up his favorites into the eyepiece for review and comment. Bob took his little telescope to task, making the motors cry

Minutes (Continued from page 4)

Punahou School on October 27th. In November, H.A.S has been invited to participate in a Kaneohe Community evening to help the community to learn about their telescopes and other viewing equipment.

A short notice has been posted in the HASTA fall newsletter to inform interested teachers of the availability of H.A.S. astronomers to bring scopes to their schools.

Are You Interested in Learning More – There was a short discussion of how members might participate at star parties and how we can all share the wealth of information our members possess. Chris Peterson encouraged those who might like to share their enthusiasm and expertise with others, to help in compiling, and creating a bank of technical and fun facts to share with club members and other interested parties. Along with this we hope to include time-sensitive material such as constellations, planets and other stellar views available in the sky on any given night. If interested, please contact any H.A.S. Board member.

Been There/Seen That – Eugene Shimabukuro entertained members with his experiences in Florida re-

out as he raced around the sky.

"Anyone want to see Neptune in this thing?" Bob asks us. He told me that the scope he uses most is his 16 inch, with a mirror he made himself. Both he and Marilyn have won optical competitions at Stellafane. What I wish for them is a large number of fine nights for their fine optics...and T-shirt weather for the Winter Milky Way.

cently, where he and his family enjoyed the Cape Canaveral launch of the Space Shuttle.

Calendar - Jim MacDonald is once again taking orders for 2008 Astronomy magazine calendars, for \$12.95 each, to club members. Interested members should contact Jim.

Night Sky Network –Should you be interested in any of the NASA Night Sky Network teleconferences please contact John. PBS is airing a new special at 8pm on September 19, 2007 called "Seeing in the Dark."

Guest Speaker – Dr. Scott Fisher, of Gemini Telescope North, spoke at length about Mauna Kea as an extraordinary base for observing. Dr. Fisher's animated and energetic talk related facts about the observatory itself as well as its contribution to cosmology. The 8.1-meter, infrared telescope is funded by the United States and four other countries. Dr. Fisher kept everyone on the edge of their seats.

The meeting was adjourned at 9:30 p.m. and refreshments were served. Joanne Bogan provided a Planetarium show for interested members following the meeting.

Respectfully Submitted,
Gretchen West
HAS Secretary

HAS Financial Report as of September 15, 2007

Initial Balance:	\$4,498.59
Receipts:	
Dues Received	118.00
Telescope Fees	20.00
Calendars	94.19
Donations	11.12
Total Income:.....	\$243.31
Expenses:	
Astronews.....	290.03
Liability Insurance.....	324.00
Refreshments	16.24
Total Expenses:	\$630.29
Ending Balance:	\$4,111.61

This month our membership increased by seven. They included **Tom and Denise Sanders; Kimberly Nguyen; Kristen Kellogg; Matthew, Martin, Charles and Kimann West**. Thanks to everyone renewing their membership this month. Clear skies to all!

Meteor Log—October 2007

by Mike Morrow

The Moon only spoils the sometimes interesting late October Taurids. Sporadic rates remain good.

Mon. the 8th to Tues. the 9th, the **Draconids**. Radiant 17h28m Dec +54 deg. Rates run from about none to a few hundred an hour. The most recent storm was in 1996 and an unexpected minor outburst produced about 10 to 15 an hour in 1999. In 2005 an unexpected short-lived event with visual rates of about 25 to 30 visual rates and radar rates of about 120 an hour occurred. The radiant is highest in the early evening hours. Draconid meteors are very slow-moving.

Sunday the 21st, the **Orionids**. Radiant 06h20m Dec +16 deg. Rates are variable but run from about 10 to 20 an hour. There may be a peak around October 17-18. The waxing Moon assists both peaks. Typical shower meteors are very fast, sometimes bright, and often (50%+)leave persistent trains.

If you are interested in observing meteors
contact Tom Giguere on Oahu at 672-6677 or write to:
Mike Morrow, P.O. Box 6692, Ocean View, Hawaii 96737

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