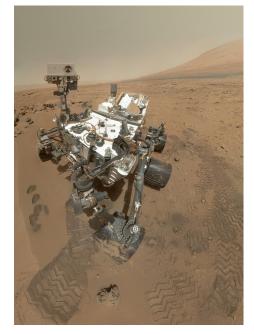


AMATEUR ASTRONOMICAL SOCIETY OF RHODE ISLAND * 47 PEEPTOAD ROAD * NORTH SCITUATE, RHODE ISLAND 02857 * WWW.THESKYSCRAPERS.ORG



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Check out Steve Hubbard's contibutions to Amateur Astronomy Magazine: Issue 77 including the 2012 trip to Mount Wilson, California and a piece on Skyscrapers. www. amateurastronomy.com/aamag_upload/ Issue77/download_AAM77_Winter_2013.html

Friday, February 1, 7:30pm at North Scituate Community Center

Exploring the Ancient Rock Record of Mars Through the Eyes of the Curiosity Rover by Ralph Milliken

NASA's Curiosity rover landed on Mars in August of 2012. The most ambitious and capable rover yet, it has already traversed over a wide range of rocks and soils that reveal evidence of a watery past in Gale Crater. From ancient streambeds to water-bearing minerals in rock fractures, it is becoming clear that the story of water on Mars is a long and complex one. This presentation will focus on the landing of the Curiosity rover, the goals of its mission, and the results from the rover over the past five months. We will also explore the orbital evidence for water-bearing rocks in Mt. Sharp, the three mile high mountain that Curiosity will ultimately drive to and explore as it continues its mission.

I'm currently an assistant professor in the Department of Geological Sciences at Brown University in Providence, RI. I finished my Bachelor's degree in geology at Indiana University (Bloomington) in '01 and then headed to Brown University to study under Prof. John Mustard for my M.S. ('03) and Ph.D. ('06). My dissertation focused on remote sensing and reflectance spectroscopy, with a special emphasis on hydrous minerals and mapping the water content of the surface of Mars. I was also fortunate enough get a chance to collaborate with European colleagues on the Mars Express OMEGA instrument.



After my (first) stay in Rhode Island I headed to NASA's Jet Propulsion Laboratory and the California Institute of

Technology for a one and a half year postdoctoral position and to work with Prof. John Grotzinger, who is now the Project Scientist for the Mars Curiosity rover. I then continued to work at JPL/Caltech as a Research Scientist until I moved to Notre Dame in 2010. In the summer of 2012 I moved back to Providence to join the faculty at Brown University, which has a fantastic geoscience department and great tradition in planetary science.

When I'm not busy playing with my kids I enjoy spending time outdoors, playing piano, and helping out as part of the science team for the Mars Curiosity rover. More information about my research and teaching interests can be found on the other pages here, but if you have any questions for me or are interested in studying geology or planetary science at Brown then please feel free to e-mail me: Ralph_MIIliken@brown.edu.



In my June President's Message I identified four areas that the Board would focus on this year. (See http://www.theskyscrapers.org/june-2012-message) In that message I said:

The first of these is to focus the attention of management on areas that directly affect Members: the format and content of the regular meetings; the creation or augmentation of other group activities; improved access to the instruments; the creation of programs that appeal to younger people; and the creation or extension of initiatives to raise the level of understanding of astronomy of all members.

As you can see, this area of emphasis is comprised of a number of related initiatives, each of which has benefited from this attention. This month I want to report on the last of these, raising the level of understanding of astronomy of all members. While there have been several activities I am going to discuss two as examples of what is being done.

On November 24, nearly twenty members and visitors gathered at Seagrave Memorial Observatory for the Skyscrapers Solar Observing Workshop. The Workshop consisted of work in the Meeting Hall reviewing the various solar phenomena, how to safely view the Sun, and procedures on how to conduct sunspots counts. After a break for lunch and fellowship there was a solar observing session outside using several types of telescopes including a six-inch reflector equipped with a "white light" filter, a Coronado 90mm Solar Max hydrogenalpha telescope, and a Sunspotter telescope that projected a solar image.

Feedback from attendees reveals that Workshop leaders Bob Horton and Dave

Huestis put together an excellent program that was well enjoyed. One participant who praised the workshop also observed that it would be nice if Skyscrapers had introductory level programs to help new and prospective members get up to speed. Which brings us to our next example.

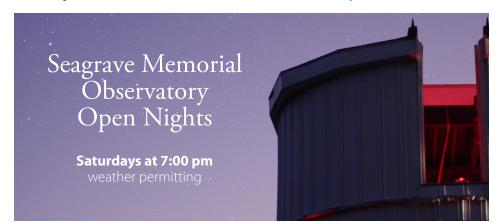
Trustee Conrad Cardano put together a class for beginners on how a telescope works for presentation January 19. Concepts that are unsettling to beginners are demystified including: What are focal length and f-ratio? How to calculate them and why are they important. The major telescope designs: refractor, reflector, and SCT. Telescope mounts: altazimuth, dobsonian, equatorial, and fork mount. Eyepieces - How to calculate magnification and the field of view.

The class was oversubscribed but the weather didn't cooperate and will have to be conducted in the next few weeks, but plainly it touched a need by many members.

The preceding are examples of formal education but it should not be assumed that we are only pursuing these types of programs. An example of less structured programs is

Pat Landers' upcoming Members Viewing Night at Seagrave to provide more opportunities for members to gather with the purpose of viewing together. Too often we gather after dark only for the purpose of public outreach. While this is an important endeavor it should not operate to the exclusion of members' collegial observing. An essential part of the glue that binds us together is the joy of shared observing.

I'll report further on steps being taken to improve the value of membership but for now let me wish you all clear skies!





The Skyscraper is published monthly by Skyscrapers, Inc. Meetings are held monthly, usually on the first or second Saturday of the month. Seagrave Memorial Observatory is open every Saturday night, weather permitting.

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Directions

Directions to Seagrave Memorial Observatory are located on the back page of this newsletter.

Submissions

Submissions to The Skyscraper are always welcome. Please submit items for the newsletter no later than **February 15** to Jim Hendrickson, 1 Sunflower Circle, North Providence, RI 02911 or e-mail to jim@distantgalaxy.com.

E-mail subscriptions

To receive The Skyscraper by e-mail, send e-mail with your name and address to jim@ distantgalaxy.com. Note that you will no longer receive the newsletter by postal mail.





I can't believe it is once again time to get ready for the election of officers to run the Skyscrapers organization for the 2013-2014 fiscal year.

Skyscrapers' president Ed Haskell has asked me to chair the Nominating Committee, and I have enlisted Bob Forgiel and Jim Hendrickson to assist in this process.

At the February monthly meeting I will announce that the Nominating Committee is seeking qualified candidates to be considered for office. Every office is open. The positions are: President, 1st Vice President, 2nd Vice President, Secretary, Treasurer, Member-at-Large 1, Member-at-Large 2, and Trustee.

If you are interested in any of these positions, please review the Constitution and Bylaws up on the Skyscrapers website where the qualifications and requirements for each position are outlined.

Contact any of the Nominating Committee members if you wish to be considered for an office. The Committee will present a slate of officers at the March monthly meeting. Ballots will be mailed out to eligible members, who will vote and return the ballots to the Election Committee for tallying at the April monthly meeting.

Thank you for your consideration. Dave Huestis dhuestis@aol.com Bob Forgiel bforgiel@cox.net Jim Hendrickson jim@distantgalaxy.com



A Few February Favorites

Perhaps you received a telescope during the holiday season and you've been anxious to see what kind of detail it can provide of various astronomical objects. While the winter months can be a difficult time

of the year to observe from southern New England, there are a few highlights for the month of February I'd like you to observe. If you don't own a telescope you can always visit one of the fine local observatories listed at the conclusion of this article.

Even a novice sky enthusiast should be able to train a pair of binoculars or telescope on our nearest neighbor, the Moon. Even low power (magnification) will reward the viewer with a beautiful image of lunar seas and craters. The more magnification one uses the more detail that will be observable. One of the best times view the Moon is during First Quarter when it will be conveniently positioned due south of your location after sunset. The right-most visible half of the Moon will be sunlit. Train your binoculars or telescope along the terminator, which is the line that separates the lit from the unlit surface. During this First Quarter phase the terminator represents the sunrise point on the lunar surface. You'll see lunar mountaintops and carter rims catching the first rays of sunshine, while the surrounding area still lies in shadow.

The next brightest nighttime object to observe in February is the planet Jupiter. On February 1st this giant world can be found high in the sky after sunset, due south of your zenith point. It will be quite apparent. As the sky darkens you'll see that Jupiter is located in Taurus, midway between the Hyades and Pleiades open star clusters.

Through a telescope, one of the first things that will catch your eye will be this giant world himself. You'll easily notice the more prominent dark bands/belts and lighter zones in Jupiter's cloud tops. You may even glimpse the famous Great Red Spot (GRS). It is nothing more than a huge storm in Jupiter's clouds that has been active for more than 400 years. Though not as red as it once was, if it is facing the Earth during the time that you're observing, you may be able to detect it.

Next you will notice up to four small points of light spread out in the plane of Jupiter's equator. These objects are Jupiter's Galilean satellites—Io, Europa, Ganymede and Callisto. They were first observed by Galileo back on January 7, 1610, with his one-inch in diameter refractor at just 28 power. It didn't take Galileo long to realize the moons were revolving around Jupiter, proof that the Copernican system was correct (the Sun was at the center of the solar system and the planets revolved around it just like Jupiter's moons revolved around him).

Despite Galileo's indisputable proof, it was still disputable. Some people even refused to look through his telescope to see for themselves; else they'd be corrupted by the device.

You too can observe what Galileo did

back in 1610. As these satellites orbit Jupiter, we earth-bound astronomers are presented with a variety of events to observe, including transits, eclipses and occultations, as well as shadows of the moons upon Jupiter's cloud tops.



Jupiter image by Steve Hubbard

If you've never observed the planet Mercury, then February provides you a great opportunity to view the closest planet to our Sun. As the month begins, Mercury will be too close to our star to be seen. However, as the days progress, this hellish world will rise away from the setting Sun. On the 11th, you can glimpse Mercury very low in the west-southwest after sunset, above and to the left (ten o'clock position) of a dim waxing crescent Moon. By the 16th Mercury will be at its highest elevation above the western horizon. Afterwards it will move closer to the horizon each night until it eventually disappears into bright twilight. Be sure not to point any optical instrument

The Skyscraper February 2013

near the Sun. Wait until after sunset before trying to locate Mercury.

If you have a telescope, you can watch Mercury go through phases like our Moon. Because of its orbit about the Sun and our observing position here on the Earth, the image size of Mercury will increase and the phase of illumination will decrease. Here are a few dates with the percentage of illumination and lunar phase comparisons: February 10, 75% (waxing gibbous); February 16, 50% (First Quarter); February 23, 19% (waxing crescent).

When talking about Jupiter I mentioned the Pleiades star cluster. This star pattern should be somewhat familiar to many of you. You see it everyday as you drive down the highways and byways of every city and state. It's the symbol for Subaru!

While binoculars do show a nice image, a telescope under low magnification (so the entire cluster fits into the field of view) is the ideal sight you want to achieve. This cluster of stars, just less than one hundred million years old, formed from a large dust cloud. The Pleiades are a beautiful cluster of stars approximately 425 light years away.

And finally, take a quick look at the magnificent Orion Nebula. Find Orion and the three stars that represent his belt. Beneath the belt is a curved stream line of stars that can be seen in a dark sky. This group of stars represents Orion's sword. A pair of binoculars will reveal a fuzzy patch of light where the middle "star" resides. Any low magnification telescope will reveal its true nature—the Orion Nebula, another vast star-forming region in our Milky Way Galaxy. One can see vast wispy tendrils of the nebula that stretch out from the center, which is about 1,350 light years away and some 30 light years across. In the future many more stars will be born from this region of space, but for now there are four primary stars, called the Trapezium, in the central region of the nebula. (This stellar birth place is an incredibly beautiful object that can lure me out into a cold winter night.)

So if you don't have a telescope of your own to enjoy the splendor of the Orion Nebula and the other wonders of the heavens I've highlighted, then by all means visit one of the local observatories' open night programs. Check their respective websites before heading out for a visit, just in case wintry conditions on the grounds make visiting hazardous. Please be forewarned to dress for cold temperatures, as the buildings housing the telescopes are unheated. Seagrave Memorial Observatory (http:// www.theskyscrapers.org) in North Scituate is open every clear Saturday night. Ladd Observatory (http://www.brown.edu/Departments/Physics/Ladd/) in Providence is open every Tuesday night. Frosty Drew Observatory (http://www.frostydrew.org/) in Charlestown is open every clear Friday night. Winter hours for Seagrave and Ladd are 7:00-9:00 p.m., while Frosty Drew begins at 6:00 p.m. with no set end time.

Keep your eyes to the skies!



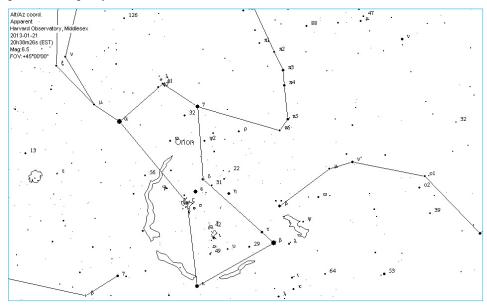
Triple Star in Eridanus **40 Edriani** Glenn Chaple

This month, we travel 16.5 light years to the remarkable triple star 40 Eridani (aka Keid and omicron2 Eridani). This system merits must-see status by virtue of the fact that one of its members is the most easilyseen white dwarf in the night sky. Trekkies would add that the primary, a K1 dwarf not unlike our sun, is orbited by the planet Vulcan - homeworld of the starship Enterprise's first officer Spock.

A small-aperture telescope and magnification of 50-60X shows two stars – the yellowish 4th magnitude primary (designated 40 Eridani A) and a faint 9th magnitude companion (40 Eridani B) some 83 arcseconds away. This ordinary-looking speck is a white dwarf with half the mass of the sun packed into a body whose diameter is only half again that of the earth. One cubic inch of its matter would weigh 4 tons!

The white dwarf has a companion of its own, located about 9 arc-seconds away. Discovered by William Herschel in 1783, 40 Eridani C is an 11th magnitude main sequence red dwarf which can be glimpsed with a 6-inch telescope and magnification of 150X or more. Viewed with a large-aperture Dob, the colors – yellow for A, white for B, and pale red for C – are amazing! 40 Eridani B and C are separated by an average distance of 35 Astronomical Units (slightly less than the gap between the sun and Neptune) and orbit each other in a 252 year cycle. They lie 400 Astronomical Units (about 37 billion miles) from 40 Eridani A, circling this star in a period estimated to exceed 7000 years.

You may not have the starship Enterprise to transport you to the 40 Eridani star system, but a good backyard telescope will put you in the neighborhood. Would you like to get even closer? A wonderful piece of artwork by Andrew Taylor takes us to the surface of a planet (Vulcan, perhaps?) orbiting 40 Eridani A. View it online at fineartamerica.com/featured/the-triplestar-system-40-eridani-andrew-taylor. html.





When you see spectacular space images taken in infrared light by the Spitzer Space Telescope and other non-visiblelight telescopes, you may wonder where those beautiful colors came from? After all, if the telescopes were recording infrared or ultraviolet light, we wouldn't see anything at all. So are the images "colorized" or "false colored"?

No, not really. The colors are translated. Just as a foreign language can be translated into our native language, an image made with light that falls outside the range of our seeing can be "translated" into colors we can see. Scientists process these images so they can not only see them, but they can also tease out all sorts of information the light can reveal. For example, wisely done color translation can reveal relative temperatures of stars, dust, and gas in the images, and show fine structural details of galaxies and nebulae.

Spitzer's Infrared Array Camera (IRAC), for example, is a four-channel camera, meaning that it has four different detector arrays, each measuring light at one particular wavelength. Each image from each detector array resembles a grayscale image, because the entire detector array is responding to only one wavelength of light. However, the relative brightness will vary across the array.

So, starting with one detector array, the first step is to determine what is the brightest thing and the darkest thing in the image. Software is used to pick out this dynamic range and to re-compute the value of each pixel. This process produces a greyscale image. At the end of this process, for Spitzer, we will have four grayscale images, one for each for the four IRAC detectors.

Matter of different temperatures emit different wavelengths of light. A cool object emits longer wavelengths (lower energies) of light than a warmer object. So, for each scene, we will see four grayscale images, each of them different.

Normally, the three primary colors are assigned to these gray-scale images based on the order they appear in the spectrum, with blue assigned to the shortest wave-



This image of M101 combines images from four different telescopes, each detecting a different part of the spectrum. Red indicates infrared information from Spitzer's 24-micron detector, and shows the cool dust in the galaxy. Yellow shows the visible starlight from the Hubble telescope. Cyan is ultraviolet light from the Galaxy Evolution Explorer space telescope, which shows the hottest and youngest stars. And magenta is X-ray energy detected by the Chandra X-ray Observatory, indicating incredibly hot activity, like accretion around black holes.

length, and red to the longest. In the case of Spitzer, with four wavelengths to represent, a secondary color is chosen, such as yellow. So images that combine all four of the IRAC's infrared detectors are remapped into red, yellow, green, and blue wavelengths in the visible part of the spectrum.

Download a new Spitzer poster of the center of the Milky Way. On the back is a more complete and colorfully-illustrated explanation of the "art of space imagery." Go to spaceplace.nasa.gov/posters/#milkyway.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration. This image of M101 combines images from four different telescopes, each detecting a different part of the spectrum. Red indicates infrared information from Spitzer's 24-micron detector, and shows the cool dust in the galaxy. Yellow shows the visible starlight from the Hubble telescope. Cyan is ultraviolet light from the Galaxy Evolution Explorer space telescope, which shows the hottest and youngest stars. And magenta is X-ray energy detected by the Chandra X-ray Observatory, indicating incredibly hot activity, like accretion around black holes.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

JANUARY REPORTS



Secretary

Skyscrapers January Meeting Minutes – 1/4/13

President Ed Haskell, called the Skyscrapers January Members Meeting to Order at 7:33PM.

President, Ed Haskell: Ed welcomed the attendees to the 1st Skyscrapers Members Meeting of this year. • Due to the activities of the past couple months, the organization has been unable to vote in individuals recently applying for membership. Applicants are voted on upon attending their 2nd meeting which was the case for Kent Cameron. Kent was unanimously voted into the membership, welcome Kent.

1st Vice President, Bob Horton: Bob announced the following upcoming speakers and meeting dates: • February 1st at Scituate Community Center with Prof. Ralph Milliken • March 1st at Scituate Community Center with Kim Arcand • April 5th at Seagrave with Glenn Chapel

2nd Vice President, Kathy Siok: Announced that name tags have been made for all members for use at our Members Meetings. Their use will assist in acclimating our newer members and guests to the membership.

Trustee, Conrad Cardano: Conrad announced a Members Program for January 19th, 10:00 – Noon at Seagrave. If an alternative date is needed, the rescheduled date will be announced. • The program titled "How a Telescope Works" is geared toward members new to the hobby and will include subjects such as Optics, Mounts, and Eyepeices.

Trustee, Steve Siok: Informed the membership of the progress to date of the 16" Meade Automation Project. • A project committee meeting is scheduled for January 19th, 1:00 – 3:00 PM at the Scituate community Center, any interest members are invited to attend.

Good of the Organization: Member Observations • Dave Huestis and Alex Bergmann counted 37 meteors in an hour during the Geminid Meteor Shower. • Craig Cortis noted his binocular observations of the asteroid Vesta. • Tom Thibault commented on the close conjunction of Ju-



piter and the Moon on the evening of December 25th. • Kathy and Steve Siok were treated to a nice view of a Sun Dog at their home.

Speaker, Josh Lake: Provided a great

presentation on Astro Imaging and Processing.

- Ed Haskell closed the meeting at 9:15PM.
 - Submitted by Tom Thibault Secretary

Upcoming Meetings

Friday, March 1 at North Scituate Community Center

Dr. Kim Arcand will be presenting "How to Color the Universe."

Friday, April 5 at Seagrave Memorial Observatory

Glenn Chaple will give a presentation titled "Double stars are twice the fun!" in which he will cover the nature of double stars, the history of double star astronomy, and techniques for observing them.

Friday, May 3 at Seagrave

Memorial Observatory

William Vaughan, a graduate student in geological sciences at Brown, will give a talk about what the MESSENGER mission to Mercury has revealed concerning the interior structure, chemistry, and the geological processes operating on Mercury.

Saturday, June 1 at Seagrave Memorial Observatory

Our June speaker will be **David Gow**, who did the restoration work on the Ladd Observatory clock drive system.

Skyscrapers "Double Star Challenge"

April 5, 2013 (rain date is the next clear Friday evening)

For our April meeting, members are encouraged to set up their telescopes at Seagrave for a "Double Star Challenge", and we can have some fun testing the optical limits of various telescopes, whether commercially or home-made. Many of us believe that our 8" Clark telescope to have some of the finest optics to be found. Let's see how well the Clark performs compared to other telescopes. Perhaps someone's telescope has even better optics?

So plan on spending this enjoyable spring evening at Seagrave Observatory. The spring peepers will be singing in the pond next door, and we'll have a great time observing together.

The "Double Star Challenge" will begin immediately after our April meeting, around 9pm.

The Skyscraper February 2013



Treasurer

Cash Flow YTD January 28, 2013	
Category Description	4/1/2012- 1/28/2013
INFLOWS	
Astro Assem	
Banquet-Registration	2,648.00
Grille	327.00
Misc	147.00
Raffle	600.00
TOTAL Astro Assem	3,722.00
Donation	
Misc Donations	903.05
Refreshment Donation	5.00
Starparty Donations	1,210.00
TOTAL Donation	2,118.05
Dues	
Family	730.00
Junior	30.00
Regular	1,400.00
Senior	620.00
TOTAL Dues	2,780.00
Misc Income	
Book Income	33.00
Interest Inc	32.24
Sale of Items	240.00
TOTAL Misc Income TOTAL INFLOWS	305.24
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OUTFLOWS Astro Assem Exp Caterer Food Fri-Sat Grille Misc Reception Speaker Fee Tent Rental TOTAL Astro Assem Exp Facilities Expense Electric Insurance, Property Propane Property Maintenance Fund Trustee Exp	960.00 43.19 208.08 12.95 127.24 108.00 585.00 2,044.46 133.54 2,573.00 80.25 445.00 888.26
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Account Balances 11/1/2012 - As of 1/28/2013

Bank Accounts

TOTAL Bank Accounts	22,492.37
PayPal	0
Checking	10,199.96
Capital One Bank	12,292.41
Dunk Accounts	



2012 Geminids Report

Dave Huestis

I observed with Alex from his dark sky in Glocester, RI.

We started at 9pm and went thru 11pm. Alex had school the next day.

I showed up around 8:45 pm and Alex came out and immediately began to observe.

I had to unload my chaise lounge, blanket, sleeping bag, etc. By the time I had settled in to observe Alex already had 15 meteors in about 15 minutes. Temp was 23 degrees.

My total from 9-11pm was 37. That

bright one, which travelled to the northwest below Cass was at about 10:15 pm or thereabouts. Just a little dimmer than Jupiter. I'd say about 2.5 mag or so.

We did have some high thin stuff around, but it did not reduce our numbers.

I had every intent to observe again when I got home, but decided not to.

That last hour I observed did not seem to be increasing to a higher peak. I've since heard some other reports that indicate the same perception.





I hadn't realized how long I've been editing *The Skyscraper* until Dave and I worked on the *75 Years of Skyscrapers* where on page 42 it is mentioned that "At the February 11, 1998, executive committee meeting, Jim Hendrickson agreed to be the editor of *The Skyscraper* newsletter."

This month marks the 180th consecutive issue I have edited. It is humbling to believe that I've invested myself in this project for more than half a Saturn year. And none of it would have been possible without the continuing dedication of the members who contribute reports, stories, and photos and I give many thanks to all those who have done so.

It is difficult to imagine what the next 15 years will bring, but I have plans to improve the newsletter and web site in the near term to include more timely and detailed information as well as an increased number of member contributions.

Thank you for your continuing support for *The Skyscraper*.

Directions to Seagrave Memorial Observatory

From the Providence area:

Take Rt. 6 West to Interstate 295 in Johnston and proceed west on Rt. 6 to Scituate. In Scituate bear right off Rt. 6 onto Rt. 101. Turn right onto Rt. 116 North. Peeptoad Road is the first left off Rt. 116.

From Coventry/West Warwick area:

Take Rt. 116 North. Peeptoad Road is the first left after crossing Rt. 101.

From Southern Rhode Island:

Take Interstate 95 North. Exit onto Interstate 295 North in Warwick (left exit.) Exit to Rt. 6 West in Johnston. Bear right off Rt. 6 onto Rt. 101. Turn right on Rt. 116. Peeptoad Road is the first left off Rt. 116.

From Northern Rhode Island:

Take Rt. 116 South. Follow Rt. 116 thru Greenville. Turn left at Knight's Farm intersection (Rt. 116 turns left) and follow Rt. 116. Watch for Peeptoad Road on the right.

From Connecticut:

Take Rt. 44 East to Greenville and turn right on Rt. 116 South. Turn left at Knight's Farm intersection (Rt. 116 turn left) and follow Rt. 116. Watch for Peeptoad Road on the right.
or • Take Rt. 6 East toward Rhode Island; bear left on Rt. 101 East and continue to intersection with Rt. 116. Turn left; Peeptoad Road is the first left off Rt. 116.

From Massachusetts:

Take Interstate 295 South (off Interstate 95 in Attleboro). Exit onto Rt. 6 West in Johnston. Bear right off Rt. 6 onto Rt. 101. Turn right on Rt. 116. Peeptoad Road is the first left off Rt. 116.





47 Peeptoad Road North Scituate, Rhode Island 02857