



Astronomy Night

The Donna O'Neill

Land Conservancy

ORANGE COUNTY STARS

City dwellers traveling to sparsely populated areas are delighted to discover how many more stars are visible there than at home. If you've not yet caught a glimpse of the **Milky Way**, you can still do so by journeying out to *The Conservancy* on Astronomy Night. But hurry! **Skyglow** caused by urban light pollution decreases the contrast between celestial objects and the sky. Although our astronomers report that skies over *The Conservancy* are not as dark as they were a decade ago, you'll still be able to view many more celestial phenomena than elsewhere in urbanized Orange County.

Conservancy astronomers are all volunteers. If you have attended Astronomy Night over the past few years, you have been stargazing with the assistance of **Mike Balmages**, our resident astronomy guru. Mike provides the **introductory lecture** orienting visitors to seasonally visible astronomical phenomena.

Like many patrons, Mike first visited *The Conservancy* after reading a notice about Astronomy Night in the local newspaper. Mike was already quite interested in astronomy. Both he and his wife, Mary, began to make regular Astronomy Night visits to enjoy *The Conservancy's* dark skies.

Mike possessed a telescope, which he brought out a few times. However, Mike's ownership of the special type of **green laser pointer** popular with astronomy enthusiasts proved to be of greater future significance. After

the formal lecture, Mike would engage in **one-on-one Q&A**, entertaining small groups using his pointer. It was obvious that Mike enjoyed interacting with his audience. On an occasion when the regular lecturer, Robert Gill, unexpectedly cancelled at the last minute, then Executive Director Laura Cohen knew exactly who she should ask to step in. Eventually, Mike transitioned from Astronomy Night understudy to Astronomy Night star!

Whereas university-trained astronomers might prefer to concentrate on the science, Mike says that he purposely slants his talks towards "star-gazing" by focusing on visible phenomena. Mike provides a bit of astronomical trivia, along with some of the mythology with which constellations are typically associated. He generally points out that **Betelgeuse** (typically pronounced "Beetle Juice"), located in the constellation of Orion the Hunter, is the largest object you can see with the naked eye; the **Andromeda Galaxy** is the furthest.

For those interested in moving beyond naked eye observation, green laser pointers aren't the only equipment you'll find at Astronomy Night. Other volunteers, including **Dave Gosman**, bring telescopes to share. Dave, an Astronomy Night volunteer for nearly a decade, is a salesman at Cal's Camera in Costa Mesa. Dave was originally recruited by longtime volunteer **Gary "Dr. Bird" Meredith**. Gary has been bringing a spotting scope—more typically used for birding—to Astronomy Night for years. As one of Dave's regular customers, Gary discovered



Dave Gosman Checks Telescope Settings

that Dave owned a telescope, and the rest is history!

Several years ago, Dave upgraded from a 3" manually controlled telescope to his current computerized **8" Celestron Schmidt-Cassegrain**. Dave enthusiastically reports that he has seen more in the last couple of years with his new "goto" scope than in the previous decade with his manual one. Computerized scopes are also ideal for Astronomy Night "star parties," says Dave. Instead of constantly having to "push people out of the way" to adjust his scope for continued tracking of celestial objects, he now just presses the button and lets computer-controlled motors do all the work!

On any given night, you are likely to meet other volunteer astronomers who bring their telescopes to share. Our Astronomy Night volunteers are a very friendly bunch, happy to share their equipment and knowledge with interested observers. Take an astronomical adventure! Come out to meet them on our next Astronomy Night!

ASTRONOMY NIGHT CANCELLED!

A successful Astronomy Night requires clear skies. Unfortunately, *The Conservancy* is influenced by coastal conditions so our skies are often cloudy. What does this mean for you? Astronomy Night is subject to last minute cancellation because of poor viewing conditions!

By 4 PM on the day of the event, *Conservancy* staff make a final determination whether to hold Astronomy Night. If the event is cancelled, by 4:30 PM, staff will place a cancellation announcement on our website (www.theconservancy.org) and telephone answering machine (949-489-9778).

We will then make our best attempt to telephone all patrons with confirmed reservations. Please be sure to provide us with a telephone number at which you can be contacted on the day of the event!

WHAT TO EXPECT

As with all *Conservancy* events, Astronomy Night **reservations are mandatory**. Please note that this event is not recommended for children under the age of 8.

Upon reservation confirmation, you will receive directions to *The Conservancy*. Please note that *The Conservancy* has **limited parking** space available. We ask patrons to carpool whenever possible. Consider meeting at a convenient parking lot or Park-N-Ride to consolidate your group into fewer vehicles.

WHAT TO EXPECT

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Please note that Astronomy night may attract a large crowd, but *The Conservancy* has only a single porta-potty located a short distance (by car) from the Astronomy Night amphitheater. Come prepared!

Please arrive promptly, as *The Conservancy* is located on private land behind a locked gate. If you come late, you will not be able to get in!

When you arrive, you will be asked to temporarily park, fill out a release waiver, and pay an entrance fee. The price for Astronomy Night is \$10 per adult, \$5 per child aged 8-18. Admittance is FREE to *Conservancy* members. You may become a member on the spot by requesting an application and paying membership dues of \$25 per individual and \$45 per household. A household includes all family members who reside at the same address.

Once all patrons have signed in, *Conservancy* staff will lock the gate, and everyone will drive to the location of the Astronomy amphitheater. Patrons park and carry items—such as folding chairs and blankets—a short distance into the outdoor amphitheater.

The evening begins with a 20-30 minute introductory lecture, after which patrons may ask questions and look through the telescopes of our volunteer astronomers.

When the evening is over, you will be escorted back to the gate, which will be unlocked by *Conservancy* staff.

WHAT TO BRING

- **Dress warmly in layers!** As the sun sets, temperatures drop and evenings can be quite cool. In the late fall and winter, you may even want to bring gloves!

- *The Conservancy* provides bench seating, but you may prefer to bring your own comfy **folding chair**. Beach chairs work especially well.

- On chilly nights, a **blanket** can make all the difference!

- **Flashlights** are needed only when Astronomy Night is over. White light emanating from flashlights will interfere with your night vision. Consider covering your flashlight lens with red cellophane which can be purchased at a craft store such as *Michaels*.

- If you own **binoculars**, you may want to bring these excellent tools for scanning the heavens.

- If you would like to bring **your own telescope**, please let us know. You may prefer to arrive early to set up your equipment with our other volunteer astronomers.

- *The Conservancy* does not provide **water, snacks, or hot drinks**, but you are welcome to bring your own. Please be careful not to litter, and take home any items you bring. *The Conservancy* does not provide trash service.

"Astronomy compels the soul to look upwards and leads us from this world to another."

Plato

THE DONNA O'NEILL LAND CONSERVANCY

The Donna O'Neill Land Conservancy is a 501(c)(3) non-profit corporation originally established in 1990 to provide stewardship for a 1200 acre south Orange County wilderness reserve located in the coastal foothills just east of San Juan Capistrano. Our mission is to create awareness of the rich natural and ecological resources of the San Mateo Watershed by providing opportunities for environmental education, biological research, and sensitive recreational access to *The Conservancy*. The public is regularly invited to join us for nature walks and hikes, butterfly counts, astronomy nights, bird walks, bat and owl outings, and much more.

For a schedule of current events, please consult our website (www.theconservancy.org), send email to <staff@theconservancy.org> or call 949-489-9778.