

Sonoma Skies



The Newsletter of the Sonoma County Astronomical Society
a non-profit scientific and educational organization

February 2003

Volume XXVII No. 2

Striking Sparks Scopes Started

By Vicki Tandecke and Victoria Vertrees

The STRIKING SPARKS Program for 2003 is off and running. Two hundred contest applications have been sent to Sonoma County schools and home school students. If you know of someone who would like an application, please call us. Contest entries must be returned by Saturday, February 22, 2003. The judges will meet on Saturday, March 1, 2003 to select the winners.

Nine SCAS members are hard at work grinding mirrors for this year's telescopes: Steve Follett, Herb Larsen, Larry McCune, Gary James, Bruce Lotz, Vicki Tandecke, Harold Follett, Coby Lafayette and Harry Linder.

The first telescope WORK PARTY was held at Cloverdale High School last Saturday morning, February 8. All the telescope bases were cut out. Thanks again to Lyn Anderson for making it possible to use the school wood shop for the project.

The PAINTING PARTY will take place on Saturday, February 22, from 10:00 a.m. until approximately 2:00 p.m. It will be at Mark Hillestad's garage, 278 Brey Road, Santa Rosa, 539-0797.

(story continues on Page 5)

Name Tags

Please wear a name tag at the next General Meeting meeting. The tags are provided, but seem to have fallen into neglect during the last several months. The Board agreed at its last meeting that wearing name tags is a hospitable club tradition that we should reinstitute.

2003 Calendars

A few copies of the 2003 RASC *Astronomers Handbooks* and wall calendars are still available. See Merlin Combs at the SCAS February 12 meeting if you wish to purchase them.

SCAS Monthly General Meeting 7:30 pm Wednesday February 12, 2003

Proctor Terrace Elementary School, 4th Street and Bryden

"What Your Astronomy Textbook Won't Tell You"

Norm Sperling, Author and Guest speaker

Norm Sperling has taught thousands of introductory astronomy students what their textbooks won't tell them. Some didn't get it. He's carefully probed the reasons why, and puts the best, student-proven ways to master astronomy into his new book.

-Too much jargon? Clarify the terms: Jupiter's "frozen gases" are either not frozen, or not gases.

-Outdated viewpoints? Reset your mindset to the latest issues. The debate about whether Pluto is a planet isn't about Pluto; experts no longer agree on what "planet" means.

-Too sure of things? Learn which Unknowns still stump astronomers. What's inside stars? What do magnetic fields do?

-Do you like a good detective story? Find out how the Northern Lights confounded evidence for the Loch Ness Monster.

-Want fresh ideas and new angles? Find out why galaxies pictured in textbooks and magazines are NOT typical. And enter a contest to make selections fairer.

-Enjoy ironies from the past? See why the Great Spiral Galaxy in Andromeda used to be classified as elliptical; and irregular.

-Want to dodge a scam? Find out why you should beware of buying a star.

-Too serious? Chortle at student boners...which point out mistakes to wisely avoid.

Norm Sperling was Science Editor at Altavista.com, an editor of Sky & Telescope magazine, and a planetarium director.

He will sell copies of his book for \$24.95 + tax = \$27.00. Autographing: free.

SCAS Membership, Renewals and Subscription Information

SCAS new membership dues are \$25 from June 1st through November 30th; and \$12.50 from December 1st through May 31st. SCAS annual renewal membership dues are \$25 per year; due and payable on June 1st each year. Membership is dropped if dues become delinquent.

SCAS Membership and Meetings

As a benefit of membership, discount subscriptions to *Sky & Telescope* and *Astronomy* magazines are available. Membership meetings take place on the second Wednesday of each month at 7:30 pm in the Multipurpose Room of Proctor Terrace Elementary School on Bryden Lane near Fourth Street in Santa Rosa unless otherwise announced in this publication. Star Parties are meetings held each month at our viewing site on the Saturday evening nearest to the new moon. The Public is invited to both.

New or renewal subscriptions for *Sky & Telescope* through SCAS: send your \$29.95 subscription check (**payable to SCAS**) along with your complete mailing address (for new subscriptions) or the *Sky & Telescope* **renewal card** and **return envelope** provided by *Sky & Telescope* (for renewals) directly to **Larry McCune, 544 Thyme Place, San Rafael, CA 94903**.

Subscriptions to *Astronomy* through SCAS occur yearly around October. Check *Sonoma Skies* for details.

Telescopes Available

As a benefit of membership, SCAS members are eligible to borrow telescopes for a \$5 a week donation. Four telescopes are available: a Celestron 8" SCT and a 5" Celestron SCT, complete with clock drive and inverter; an 8-inch Newtonian on Dobsonian mount; and a 80 mm refractor on a motorized equatorial mount. Contact Joan Thornton at 707-762-0594

Access To Palmieri Observing Site

The Palmieri Observing Site is locked to public access. For use during monthly star parties, SCAS members can obtain the combination to the gate lock to the site by contacting any board member listed to the right.

Publication

Sonoma Skies is the newsletter of the **Sonoma County Astronomical Society** (SCAS) and is published each month. Subscriptions to the newsletter are included as part of membership to the Society.

Articles, news items and member announcements for *Sonoma Skies* are welcome. The deadline for articles for next month is the 25th of this month. Submissions must be typed or, if on computer media, in a commonly used word processing and/or graphics format, and may have graphics (pictures, drawings, etc.) They are published on a FCFS basis, space permitting, and may be edited.

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benbarker@earthlink.net

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SCAS Elected Board

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SCAS Appointed Positions

Amateur Telescope Making

Steve Follett 542-1561 sfollett@sonic.net

Young Astronomers Advisor - Vacant

Striking Sparks Program & Sparks Day Coordinators

Vicki Tandecke 528-8925 vtandecke@webtv.net

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SCAS "Public" Star party Coordinator

Loren Cooper 525-8737 lorenco@sonic.net

SCAS Library

Joan Thornton 762-0594

phonyjoanie@juno.com

SCAS has a library of over 70 books that may be checked out by SCAS members. A book may be checked out until the next meeting or for one month. Requirements to check out a book:

1. Be a SCAS member.
2. Give me (Joan Thornton) your name and phone number.

The Semi-Sirius Astronomer

by Herb Larsen



Well, he was driving his new telescope way too fast with the electronic controller, and when it stopped suddenly at M31, the airbag went off!

SCAS Star Party

The next SCAS Star Party is Saturday evening, March 1, 2003.

Location: Palmieri Observatory, Mercuryville, CA
(on the slopes of Geysler Peak near The Geysers)

Altitude: ~2700 feet

Longitude: 122deg 49min

Latitude: 38deg 46min

Sunset: 6:04 p.m. PST, Sunrise: 6:42 a.m. PST (3/2/03)

Moonset: 4:48 p.m. PST, Moonrise: 6:56 a.m. PST (3/2/03)

End Astronomical Twilight: 7:32 p.m. PST

Begin Astronomical Twilight: 5:14 a.m. PST (3/2/03)

Public Astronomy

by Len Nelson

SCAS Community Activities Director

lennelsn@attbi.com (707) 763-8007

School Star Parties and other astronomy programs are a public service of SCAS.

Your assistance at star parties is most welcome and anticipated. I am sure that if you have never been to one you will be delighted with the experience!

Star Parties presently on the agenda are:

Feb 26 - Windsor Creek Elementary in Windsor

March 26 - Evergreen Elementary in Rohnert Park

Weather conditions have been a real problem this school term. I do not recall a year when so many school star parties were cancelled or conducted under what can only be described as poor viewing conditions. Only one school star party (that at Meadows Elementary in Petaluma on January 7th) was conducted under 'clear skies'!

Fortunately, the primary targets for school star parties are bright objects like the Moon and the major planets like Jupiter and Saturn. These are things that kids in the K -5th grades can relate to and have studied in their classes. Unfortunately, even these 'bright' objects were no match for heavy fog or clouds at most events this year.

Most school star parties are scheduled with an alternate date so that, hopefully, one of the two dates will offer some semblance of useable viewing conditions. This year, even that approach has not allowed some scheduled school events to go forward even when they were rescheduled again offering these schools a total of four opportunities!

On a positive note, each school for which a star party is scheduled also gets an in class slide presentation of what they could expect to see under decent sky conditions. They are also advised to visit the Robert Ferguson Observatory on public nights and told of upcoming school star parties at other local schools if theirs is cancelled. So, hopefully those kids that are most motivated might steer their parents to these events.

I'd like to thank the following Star Party volunteers. Their efforts have made the school star parties held since last October a real success!

Ben Barker, Bob Johnston, Dave Smith, Ed Megill, Eric Chazankin, Frank Siroky, Laurie O'Hara, Lyn Elder, Duane & Mark Bellinger, Merlin Combs, Robert Leyland & Tom Burrows.

SCAS Egroup URL

<http://groups.yahoo.com/group/scas>

SRJC PLANETARIUM SHOWS

With Ed McGill, Planetarium Director

Santa Rosa Campus, Lark Hall, Room 2001

Program Times

7:00 pm & 8:30 pm - Fridays & Saturdays

1:30 pm & 3:00 pm Sundays

General Admission \$4 - Students & Seniors \$2

Tickets available at door 30 minutes before show

No Children under 5

Parking Permits Required at \$2

For more information, call 527-4465 or 527-4371

**SCAS members provide telescope viewing
whenever weather and light conditions permit.**

<http://www.santarosa.edu/planetarium/>

Volcanoes of the Solar System

January 17 - February 23

Volcanoes are more than hot rock and gas; they are trademarks of an active world. The Earth is just such an active world. In this show we will learn about volcanoes: how and why they form, types of volcanoes, and kinds of eruptions and materials issued. Discover other planets with volcanoes and how they differ from Earth's. You will visit other planets as we travel the Solar System in search of the largest and most active volcanoes.

Our Star the Sun

February 28 - April 6

We think of the Sun every day. How often, though, do we think of the Sun as the nearest star? In this show we will learn about our star the Sun: how and when the Sun and planets were formed, what we find inside our star, why it shines, and what will become of the Sun. The show also includes sunspots, solar prominence, solar flares, and the solar wind, as well as Sun related phenomena such as solar eclipses, rainbows, and the aurora.

2003 SCAS Calendar

Wed. Feb. 12 7:30 pm General Meeting at Proctor Terrace Elementary, 4th Street and Bryden Lane, Santa Rosa.

Thu. Feb. 20 SCAS Board meeting @ Harry Linder's

Sat. Feb. 22 Striking Sparks telescope Painting Party

Sat. Mar. 1 SCAS Star Party at the Palmieri viewing site

Sat. Mar. 1 Striking Sparks entry judging

Sat. Mar. 8 Public Star Party, 7 p.m. Youth Community Park, Fulton Rd., Santa Rosa

Robert H. Ferguson Observatory

Public Observing

Phone: (707) 833-6979

<http://www.rfo.org>

The 40-inch Moore Dobsonian in the west wing has been removed for reconstruction purposes. Bill Russell has graciously agreed to allow his 24-inch Dobsonian to be installed in its place.

While there is no set admission fee for the solar viewing, donations to help defray the costs of operating the observatory are appreciated. There is, however, a \$2 fee for admission to the night viewing sessions.

SCAS members are welcome to set up telescopes to assist with the public viewing. However, automobile access is closed at dusk, so arrivals after dusk will need to be able to carry their equipment in from the parking area by the horse stables.

The next public SOLAR OBSERVING DAY IS

SAT. March 8 12:00 Noon to 4 PM

The next public OBSERVING NIGHT IS

SAT. March 8 7:00 PM -

VMOA and The Santa Rosa Junior College
Community Education Department
Present

“THE WINTER NIGHT SKY”

Lectures on the constellations, including
Mythology, Cosmology, and Astronomy.

Presentations begin promptly at 7:00PM and last approximately 90 minutes. Please arrive about 30 minutes early for check-in. After each presentation (sky conditions willing), you will enjoy a review of the constellations in the actual night sky and learn how to find them for yourself. The constellations, and the objects within them, will be viewed through binoculars and telescopes, including the 24-inch reflecting telescope, until or beyond 10:30PM (depending upon interest and enthusiasm).

Requested donation: Single session fee \$20

WINTERNIGHT SKY LECTURES in February and March:

Feb 19: Spiral Arms; The Galactic Center and Anti-Center; The Galactic “Halo” and Globular Clusters
Canis Major, Canis Minor, Puppis

Feb 26: Obliquity of the Ecliptic; Equinoxes and Solstices
Gemini, Lynx, Cancer
The planet Jupiter

Mar 5: Leo, Leo Minor, Sextens, Crater

SCAS "Public" Star Party

The next SCAS "Public" Star Party is Saturday evening, March 8, 2003.

Location: Youth Community Park, located in Santa Rosa on the west side of Fulton Road, between Guerneville Road and Piner Road, just opposite Piner High School.

Sunset: 6:11 p.m. PST

Moonset: 11:45 p.m. PST

End Astronomical Twilight: 7:39 p.m. PST

Striking Sparks Scopes Started

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The ASSEMBLY PARTY will be on Saturday, March 15, also at Mark's garage. Volunteers are welcome at both parties.

SPONSORS of this year's telescopes are: Mr. & Mrs. Bev Barge, Catherine Colwell, The Frank Hejtmanek Trust, Robert Leyland, The Young Astronomers, Coby Lafayette, Ben Pietsch and AANC. We appreciate the strong support of all our sponsors for helping to make the STRIKING SPARKS program happen again for the EIGHTEENTH year.

STRIKING SPARKS DAY is Saturday, March 29TH. SOLAR VIEWING begins at 4:00 p.m. Potluck dinner starts at 6:00 p.m., followed by the Striking Sparks Award Program. Weather permitting, the new scopes will get their first use during star viewing until 9:00 p.m.

We look forward to awarding ten new telescopes to Sonoma County students and to seeing everyone on the 29th. If you have any questions please call either Vicki Tandecke at 528-8925 or Victoria Vertrees at 544-4409.

ALMANAC - courtesy of SRJC Planetarium

February's Full Moon occurs at 3:51 a.m. on 2/16/03

2/19/03 - On very clear evenings, about an hour after sunset for the next two weeks, look for a faint cone-shaped glow of diffused light rising from the western horizon. This is known as Zodiacal Light. Zodiacal Light is sunlight reflecting of interplanetary dust lying in the plane of our solar system. This dust is thought to be debris from the collisions of minor planets and meteoroids.

Last Quarter Moon occurs at 8:46 a.m. on 2/23/03

New Moon occurs at 6:35 p.m. on 3/2/03

SSU Dept. of Physics & Astronomy Observatory - Public Viewing

Winter 2003 Friday evenings:

February 21 7:00 - 9:00 Jupiter, Clown Face Nebula
March 7 7:00 - 9:00 The Moon, Supernova Remnants

The observatory is inside the football field at the SE corner of the campus, East Cotati Avenue and Petaluma Hill Road, 2 miles east of U.S.101 at Cotati. Follow signs from the freeway to the campus. Call before coming if it appears likely that clouds may force cancellation.

Observatory Phone No. (707) 664-2267

Until about April 2004, major construction will be taking place in fields immediately adjacent to the stadium area where the SSU observatory is located. During this time, access to the observatory will become somewhat difficult. Specific details of how to get to the observatory may occasionally change during this time period in response to construction activity.

During this time access to the observatory will be available by means of gates along the fence that separates the stadium area from the baseball field and the fields where Lacrosse and soccer are played. These fields, immediately to the north of the stadium area, and the stadium area are along the side of the campus that runs along Petaluma Hill Road. Visitors must walk across these fields from the central campus areas to arrive at the gates to the stadium and the observatory.

The construction area -- shown in black on the following map -- is fenced off and may only be entered by construction workers.



The most convenient parking lot for those visiting the observatory is now lot H adjacent to the tennis courts.

It is not SSU's intention to cancel Public Viewing Nights at the observatory during construction. However, visiting the observatory should be somewhat more exciting than in recent years. Bring a flashlight, be prepared to walk across a grass playing field, and allow some extra time. Visiting the SSU observatory is now even more of an adventure!

SCAS Membership

by Harry Linder, Membership Director
harry@sonic.net

New Members

The SCAS is pleased to welcome and acknowledge the following new members:

Walt Bodley, Philip Cannon, Eric Chazankin, Bruce Crozat, Robert Johnston, Bill Kirst, Allan & Nathan Loceff, Al Mathers, Dan Reynolds, Michael Santi, Tim & Mary Schieberl, Ron Storey, Maudeane Taunton, Roberta Zobel, Sam Crossman and Greg Lindh.

Their addition swells our dues paying membership to 152 members plus the ten 2002 Striking Sparks Telescope winners!

CAN YOU DO THE SCAS A BIG FAVOR?

Of our 152 dues paying members, only 21 of you have opted to receive the monthly newsletter by e-mail only. Printing, folding, addressing, stamping and mailing the paper newsletter each month is costly and time consuming. There are better ways that we can spend our limited financial resources. If you can do without a snail-mail copy of the newsletter, please send an e-mail to the membership director, Harry Linder and tell him that you would like only the electronic version. Thank You !

Silicon Valley Astronomy Lecture Series

Dr. Seth Shostak (SETI Institute) will give a non-technical illustrated talk on:

**“What Happens After Contact:
Responding to a Message from Space”**

Wednesday, Mar. 5, 2003, 7 pm

in the Smithwick Theater, Foothill College,
El Monte Road and Freeway 280, Los Altos Hills, California

Free and open to the public.
Call the series hotline at 650-949-7888 for more information.

Dr. Shostak will discuss what plans scientists have if they detect a radio message from an alien civilization out among the stars. He will examine how any such messages will be verified (to avoid hoaxes), how the news will be announced, how information from the message would be disseminated, and how humanity might decide whether and how to reply.

co-sponsored by:
NASA Ames Research Center
Foothill College Astronomy Program
SETI Institute
Astronomical Society of the Pacific

Benjamin Dean Lecture Series Morrison Planetarium

**Winter 2003 Lecture Theme:
Galaxy Formation and Supermassive Black Holes**

Tickets are \$3.00 per person per lecture. All lectures begin at 7:30 p.m. Purchase in advance of lecture date recommended. Make checks payable to Morrison Planetarium. Send self addressed stamped envelope and check to:

Dean Lecture Series, Morrison Planetarium
California Academy of Sciences
Golden Gate Park
San Francisco, CA 94118

February 25

Dr. Alan Dressler
Carnegie Institute of Washington

The Birth of the Milky Way: The First Step in our Origins
Step by step, the astronomical events and processes that led to our world and made possible the emergence of life are becoming better understood. The universe as we see it today began sometime within a billion years of the Big Bang, with the formation of the first stars and galaxies, and the synthesis of the first heavy elements. A goal of astronomy over the next two decades is to observe and understand how stars and galaxies were born by looking back in time to their first appearance. Through this research, with new giant telescopes on Earth, a new space telescope, and powerful computer simulations, we hope to answer the general question of how galaxies formed and tie this to the specific question of how our own Milky Way Galaxy evolved and gave birth to the Sun and its family of planets 5 billion years ago.

March 4

Dr. Karl Gebhardt
University of Texas at Austin

Dark Matter and Black Holes: Shedding Light on Galaxy Formation

In the past ten years, we have made enormous strides in our knowledge of how galaxies form and evolve. In particular, two essential components of nearly all galaxies are supermassive black holes at their centers and the dark matter that dominates the outer regions. These are extremely difficult to study since neither gives off any light, yet they are key elements to any theoretical model for how galaxies form. After tremendous efforts from the largest ground-based and space-based observatories, a common picture is beginning to emerge. We are living in a special time in which we are quickly unraveling secrets to the mysteries of galaxy formation.