

BENNETT VALLEY VOICE



BENNETT VALLEY HOMEOWNERS' ASSOCIATION
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MARRING THE WINDOW TO THE UNIVERSE

LIGHT POLLUTION

BY TIMOTHY FERRIS

Editors note: Since we first published this article in 1994, we have received many requests for copies. Therefore, we are printing it again, and adding more information on light pollution.

In addition to the many conspicuous virtues of living in Bennett Valley—the sweeping mountain views, abundant wildlife, the clean, bracing air, and the peace and quiet of country life—we are blessed with another important resource, less often talked about but no less valuable: the sight of dark night skies filled with stars.

As recently as a generation or so ago, most Americans grew up in places where they could go out on a moonless night and see the four thousand or so stars normally visible to the naked eye. Parents taught their children to recognize Cygnus the swan and Orion the hunter, constellations that date back to the days of the ancient Greeks.

Today, as civic and commercial electric lighting has spread across the continent, many children—and often their parents—have never been privy to the thrilling sight of a genuinely dark night. When they look up at night they see a milky gray scrim, through which can be perceived only a few dozen stars. Lost to them is excitement of a direct encounter with nature on a grand scale, and also an important sense of historical continuity: After all, it was knowledge of the stars that oriented Odysseus as he navigated the Mediterranean, guided the Magi in search of the infant Jesus, and led escaped slaves on their way north to freedom.

Responsible for this loss is what astronomers call “light pollution.” In a quest to better illuminate streets, sidewalks, and parking lots, many municipalities have inadvertently installed lights that also shine upward, blotting out the stars. It is estimated that Americans waste \$1 billion worth of electricity a year illuminating the bellies of airplanes and birds.

Light pollution has already taken a toll in Bennett Valley. At Rocky Hill Observatory off Enterprise Road, where an 18-inch reflecting telescope is used to search for exploding stars in distant galaxies, we estimate that about a third of the naturally visible stars are blotted out by the glare coming from Santa Rosa and other neighboring communities. Near the zenith the sky remains dark enough that we can investigate galaxies and quasars up to a billion light years away. But our community is growing, and each year there are a few more lights in the Valley, like a twinkling reflection of the real constellations above.

If we are to preserve our night skies, we need to keep light pollution under control in the Valley, while encouraging our neighbors to do the same. Homeowners can help by taking a few easy steps that also save money. To fight light pollution, make sure your exterior lights are shielded. Ideally none of your neighbors—even those across the Valley—should be in the line of sight of a bare bulb. Avoid the use of glaring “security” floodlights that stay on all night. Law enforcement officers advise that much better security is provided by lights equipped with motion sensors. These come on suddenly, startling intruders, and they can pay for themselves by cutting your monthly electric bill.

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On the municipal level, great progress would be made if nearby communities shaded their street lights and replaced obsolete high-pressure sodium (HPS) globes with low-pressure sodium (LPS) ones. LPS lights use a third as much electricity as HPS, and they have a pleasing, sun-yellow hue. (A recent survey in Tucson, Arizona, which years ago passed an ordinance mandating LPS street lights, revealed that 88 per cent of city residents preferred them to the old kind.) By taking just these few simple, cost-saving precautions, we can help insure that our children and their children will continue to benefit from the Valley's priceless window on the wider universe.

GOOD NEIGHBOR OUTDOOR LIGHTING

If outdoor lighting is not well-designed and properly installed, it can be costly, inefficient, glaring, and harmful to the nighttime environment. These are the issues:

Glare: Poorly designed or poorly installed lighting can cause a great deal of glare that can severely hamper the vision of pedestrians, cyclists, and drivers, creating a hazard rather than increasing safety. Glare occurs when you can see light directly from the fixture or bulb.

Light Trespass: Poor outdoor lighting shines onto neighborhood properties and into bedroom windows, reducing privacy, hindering sleep, and creating an unattractive look to the area.

Energy Waste: Much of our outdoor lighting wastes energy because it is not well-designed. This waste results in high operating costs and increased environmental pollution from the extra power generation needs. We waste over a billion dollars a year in the US alone lighting up the sky at night.

Sky Glow: A large fraction of poor lighting shines directly upwards, creating the adverse sky glow above our cities that washes our view of the dark

night sky. In addition to the cost savings, less sky glow will allow future generations to enjoy the beauty of the stars.

What is good lighting? It has four distinct characteristics:

1. It provides adequate light for the intended task, but never over-lights.
2. It uses "fully-shielded" lighting fixtures that control the light output in order to keep the light in the intended area. "Fully-shielded" means that no light is emitted above the horizontal. Fully-shielded light fixtures are more effective and actually increase safety, since they have very little glare. Glare can dazzle and considerably reduce the effectiveness of the emitted light.



Turn this...

Into this.

The National Electrical Manufacturers Association (NEMA) adopted this standard for outdoor area lights back in the 1960's, before conserving energy was a big concern. There are still millions of these fixtures in use in the United States.

Today, several manufacturers, including Hubbell Lighting, Inc., provide full cut-off, clip-on shields to replace the refractor originally used with this fixture. The shield reflects wasted up-light back to the ground for a better quality light.

Here are graphic representations of the light distribution of the NEMA head fixture, with and without the shield.

3. It has the lighting fixtures carefully installed to maximize their effectiveness on the targeted property and minimize their adverse impact beyond the property borders. Positioning of fixtures is very important. Even well-shielded fixtures placed on tall poles at a property line can cast a great deal of light onto neighboring properties. This "light trespass" greatly reduces and invades privacy, and is difficult to resolve after the installation is complete. Fixtures should be positioned to give adequate uniformity of the illuminated area. A few bright fixtures (or ones that are too low to the ground) can often create bright "hot spots" that make the less-lit areas in-between seem dark. This can create a safety problem.

4. It uses fixtures with high-efficiency lamps, while still considering the color and quality as essential design criteria. High efficiency lamps save energy, reduce operating costs, last a long time, and reduce costly maintenance. Their initial cost is more, but such fixtures will save you lots of money in the long run.

Balancing against high-efficiency, though, is the quality of the light emitted. In some applications, the yellow light cast by low-pressure (LPS) sodium lamps may not be as desirable as a less-efficient, but much whiter, compact-fluorescent, metal-halide, or even incandescent light source. In other applications, color is not of importance, and LPS lamps do a very good job at low cost. Well-designed shielded lights can usually be lower in wattage, saving even more energy and money. They will actually light an area better than unshielded lights of higher output, because they make use of all the light rather than wasting some (or much) of it.

The above information was provided by the New England Light Pollution Advisory Group (NELPAG). For more information, write them c/o Daniel Green Smithsonian Observatory, 60 Garden St., Cambridge, MA 02138—or via computer e-mail to nelpag-request@yeehah.merk.com via Internet. The International Dark-Sky Association, 3534 No. Stewart, Tucson, AZ 85716, also has a wealth of information. They can be reached on the Internet at (<http://cfa-www.darksky.org>) Or simply check “light pollution” on the Internet.

COMMUNITY DAY

Good food, an auction, wine tasting...this is what Bennett Valley residents were treated to at the annual and very popular Community Day. The event was held at Kendall-Jackson this year and was a huge success.

The weather turned out to be glorious, the views of the valley from the Kendall-Jackson site were fabulous, and those who stayed until the end were treated to an exciting demonstration by a helicopter rescue team.

Outdoor Lighting

The Good



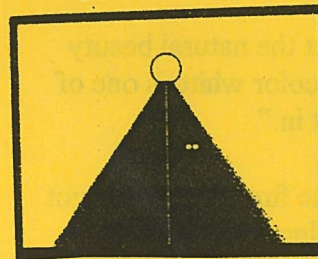
- More cost efficient.
- Directs light down and to the sides as needed; light control.
- Reduces glare; more even illumination.
- Reduces light trespass onto neighboring properties.
- Helps preserve the dark night sky.

The Bad



- Wastes energy into the sky.
- Glare, light trespass and harsh illumination.

The Ugly



- Illuminates little but for the bellies of birds.

BV ROAD CLEAN-UP DAY

The BVHA is sponsoring a Clean-Up Day for Bennett Valley Road on Sunday, October 12th. The clean-up will begin at 7:00 AM. We are starting this early to avoid as much traffic as possible.

We will meet at the Firehouse and organize clean-up teams from there.

No children please -Unfortunately, Bennett Valley Road is too hazardous to risk having children participate.

HEARD IN THE VALLEY

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COMPILED & EDITED BY MARILYN STOCKS AND ROGER CREER

“The purpose of the Bennett Valley Area Plan was to preserve the integrity of the Valley, so as it became built out, (it’s about 50% built out now) the look of it would remain the same.”

“Can you believe this Valley is next door to the most populated area in the entire county?”

“Bennett Valley is developing a real cache and becoming one of the premier areas of Sonoma County.”

“When we decided to move here, we drove up and down every road in the Valley. It’s not hard to tell homes built after 1978 when the Bennett Valley Area Plan was adopted. It’s a tribute to those who were farsighted enough to make it happen.”

“The goal is to fit in and respect the natural beauty and wildlife of the Valley. The color white is one of those things that just doesn’t fit in.”

“I could not believe how fast the fire department got to our home.” (Quote of a resident with an emergency on Christmas Day)

“We have lived here over twenty years and when we look out over the Valley, it looks almost the same. The only time we notice the difference is at night when we can see more lights.”

“I can’t believe how much I enjoyed Community Day. I expected to spend an hour or so, but I stayed almost the whole afternoon.”

“What a difference it makes when people use native plants in areas with high visibility.”

“Time has proven that even with many various interests, we all can have a win-win.”

“It is amazing the difference reflectivity makes when selecting paint colors. Most paints are now rated by a reflectivity index. Many similar colors are barely noticeable up-close as being different and yet, from a

distance, the paint with the lower reflectivity is dramatically less noticeable.”

“Bennett Valley self selects and the people who live here are pretty much on the same page. Sometimes on different sides of the page, but at least on the same page.”

“It’s been a delight to watch the on-going restoration of the circa 1900 ranch as I daily drive along Bennett Valley Road.”

“The Bennett Valley Area Plan does seem to be working.” (Quote of an elected county official)

“Remember, our best attempts to blend in are never noticed.” (Quote by a member of a subdivision association)

“The Bennett Valley Design Review Committee has been a big help to the staff in helping meet our responsibilities to the plan.” (Quote of a County Permit and Resource Management Department employee)

“Maybe we should publish a list of all the talent in the Valley: Some of the world’s best wine, some of the country’s best farmers, world class artists, football stars, experts in almost every field, some of the best teachers, real people, and on and on.
Is this a great place or what!”



BVHA BOARD OF DIRECTORS

Bill Sullivan, President

Ray Longman, Vice-president

Nancy Del'Ergo, Treasurer

Eve Boling, Secretary

Roger Creer,

Marilyn Stocks,

Nancy Batson,

Jim Katon,

The Board meets the 3rd Wednesday of every month at 7:30 PM at the Bennett Valley Fire Station. We invite your attendance and participation.

ELECTION OF BOARD OF DIRECTORS

THE BVHA NOW HOLDS ITS ELECTIONS BY MAIL. BELOW ARE STATEMENTS PREPARED BY THE CANDIDATES RUNNING FOR THE BOARD.

ROGER CREER: Having lived in Sonoma County at various times since 1974, I am continuously amazed at the uniqueness and beauty of the place in which we all live. At one time, while living in San Francisco, I had an office in San Jose. That office was approximately the same distance south as my home is today north of San Francisco. It is impossible to compare the differences in the quality of life between these two areas.

For visiting family and friends, I take them on my private "RAH RAH" Sonoma County Tour. Perhaps you do something similar for your out-of-town guests. Without exception they are always impressed. Most acknowledge that the best of the best is Bennett Valley. How fortunate we all are.

One of the truly special attributes of Bennett Valley is how well all of the various interests have been able to work together. This is not just a residential area but also has significant farming and entrepreneurial interests. I believe we all have been able to live and/or do business side-by-side in a very satisfying way. If the term "win/win" was not created in reference to this Valley, it certainly could have been. I ask and gratefully thank you for your support for re-election to the Board of Directors of the Bennett Valley Homeowners Association.

LEANORE MESCHES: As a 25 year resident of Bennett Valley (and prior to that an 11 year resident of Holland Heights) I would like to serve on the BVHA Board.

I, like others, am especially interested in preserving the look of the valley, the rural/residential quality, and helping maintain a positive sense of community.

Thank you for responding to my volunteering of time. I hope I have the opportunity to participate with the rest of the Board members.

MARILYN STOCKS: My family and I have been residents of Bennett Valley for over twenty years. For many years I served on the Bennett Ridge Architectural Committee, and for the last three years I have been a director on the Homeowners' Board. I feel that I am acquainted with the current issues facing our community.

I am strongly committed to preserving the Valley's unique environment and would like to contribute my experience and knowledge to the community. Therefore, I ask for your vote for an additional three year term.

VOTE FOR THREE CANDIDATES

Please return your ballot to the BVHA, PO Box 2666, Santa Rosa, CA 95405.

There will be no nominations from the floor.

*Only members can vote.**

Roger Creer _____

Marilyn Stocks _____

Leanore Mesches _____

If you are not a member and would like to vote, send \$10.00 along with your ballot to the BVHA.

VOLUNTEERS NEEDED TO HELP PLACE CEMENT PAD
FOR US MAIL BOX ON BENNETT VALLEY ROAD.
PLEASE CALL 576-0405.

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Santa Rosa, CA 95405



BENNETT VALLEY CLEAN-UP DAY

SUNDAY, OCTOBER 12, 1997
7:00 AM (BRIGHT & EARLY)

MEET AT THE FIREHOUSE

HELP US MAKE BENNETT VALLEY EVEN MORE
BEAUTIFUL!

