



ISSUE NUMBER 56

CACHUMA FLYER

MARCH/APRIL 2001

A PERILOUS NEIGHBOR

by Linda TAYLOR

Each Fall when my children were attending elementary school at the edge of Santa Barbara and Goleta their teachers delivered a message about the Castor Bean plant. They warned their young students of this peril which they passed en route to school each day through vacant lots and waste areas of the neighborhood.

Since it appears that this plant is flourishing in our area in spite of diminishing vacant lands, I was spurred to investigate further.

Castor Bean, *Ricinus communis*, thrives in temperate and tropical climates all over the world; U.S., Africa, Mexico, Spain, Philippines, Venezuela, Australia, and Brazil, to name a few. Ethiopia is its place of origin. Both its common and latin names are interesting; it is not a true bean, but a member of the Spurge family, Euphorbiaceae. Ricinus, which means tick, refers to a tick which the seed supposedly resembles. English traders who purchased the oil thought it came from another plant called *Agno castor* and gave it the common name of Castor.

Found in Egyptian tombs dating to 4,000 B.C., Castor Beans, grown for their oil for lamps, were one of the earliest plants cultivated as a commercial product.

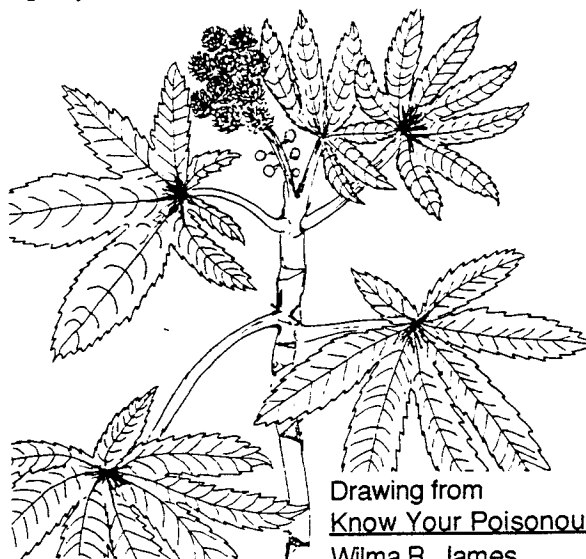
Seeds, three to a pod, are each unique with odd patterns traced in white on a dark seed. With its large, glossy leaves and reddish stems, flowers, and veins, the Castor Bean is an attractive plant; however, it is one of the most poison natural sub

stances known. By inhibiting the synthesis of proteins in the intestinal wall, Castor Beans cause digestive distress, severe diarrhea, and dehydration which are frequently deadly. In spite of its toxic potential, it has been cultivated to produce a laxative--the common castor oil.

Considered a panacea by many herbalists, its benefits are said to include cures for asthma, boils, burns, cholera, colic, deafness, "delirium", fever, flu, worms, headache, leprosy, rheumatism, sprains, toothache, tuberculosis, the "itch," ringworm, warts, and more!

During the first world war, the plant was cultivated to produce oil for airplane engines and it continues to be used in racing motorcycles and cars because it clings to hot moving parts in engines. Its water resistance makes it a good coating for protective coverings, insulation, food containers, and guns. As a primary raw material for the production of sebacic acid, the plant is used in the manufacture of nylon and other synthetic resins and fibers.

Some of the other products which contain it are soap, dye, ink, brake fluid, and insecticides.



Drawing from
Know Your Poisonous Plants.
Wilma R. James



LIZ MASON: CACHUMA LAKE NATURALIST

It was recently announced that Liz Mason has been hired as Head Naturalist at Cachuma Lake. She has been Assistant Naturalist for the last six and a half years. Liz is no stranger to most of us, but I thought that you'd like to know a little bit about her life before Cachuma.

Liz was born in Altadena, California and grew up there for the most part with her three sisters and one brother. During that time the family spent about 18 months in India while her father, an engineering professor, helped set up a project there. Returning to Altadena, Liz finished her schooling and graduated from John Muir High School. During high school her botany teacher was Mr. Muir, grand-nephew of The John Muir.

Liz feels that her enthusiasm for the outdoors and the study of nature was kindled by her father and her mother. When she was eight years old she went on her first backpacking trip. Every summer her father took the family way back into the Sierra for two weeks. It was a key experience of her younger years that was just the beginning of many others to come.

In 1979 Liz moved to Santa Barbara with her sister. While attending City College during this

time, she was inspired by Bob Cummings who taught Botany Classes.

After City College Liz visited her parents who were living in Amsterdam during another research project. While there she decided to live in Paris to study French, and ended up staying for two years.

After returning to Santa Barbara, Liz worked at the Botanic Garden for 3 1/2 years during the 1980s. While she was there, she worked in several different positions in the Education Department and when she left she was Acting Director of Communications. Then she had the opportunity to go to UCSB and complete her Bachelors Degree in Anthropology. It was about this time that she decided that she would like to work as an Interpretive Naturalist.

To accomplish that goal, Liz contacted the Student Conservation Association and secured a three-month internship as a naturalist at Columbia River Gorge National Scenic Area. It was an interesting place to work. In the morning she might be leading a desert hike to the rock art sites and in the afternoon doing interpretation of the rain forest.

Back to UCSB, Liz was taking science courses in preparation for Graduate School. She has recently been pursuing her Masters Degree in Plant Ecology with a focus on native grasses.

Some of the goals that Liz has for the Naturalist Programs at Cachuma Lake:

- Develop programs that will reach out to middle school and up through college.
- Develop Science-based Discovery Kits.
- Develop Thematic Hikes & Tours.
- Add Art and Literature aspects to the tours, etc.
- Get more Docents involved in interpretive programs.
- Get some Research Projects started at Cachuma and possibly involve high school or college groups.

by Helen Osenga

Good Neighbor OUTDOOR LIGHTING

PRESENTED BY THE NEW ENGLAND LIGHT POLLUTION ADVISORY GROUP (NELPAG) AND SKY PUBLISHING CORP.

What is good lighting?

Good outdoor lights improve visibility, safety, and a sense of security, while minimizing energy use, operating costs, and ugly, dazzling glare.

Why should we be concerned?

Many outdoor lights are poorly designed or improperly aimed. Such lights are costly, wasteful, and distractingly glary. They harm the nighttime environment and neighbors' property values.

Glare Here's the basic rule of thumb: If you can see the bright bulb from a distance, it's a bad light. With a good light, you see lit ground instead of the dazzling bulb. "Glare" is light that beams directly from a bulb into your eye. It hampers the vision of pedestrians, cyclists, and drivers.

Light Trespass Poor outdoor lighting shines onto neighbors' properties and into bedroom windows, reducing privacy, hindering sleep, and giving the area an unattractive, trashy look.

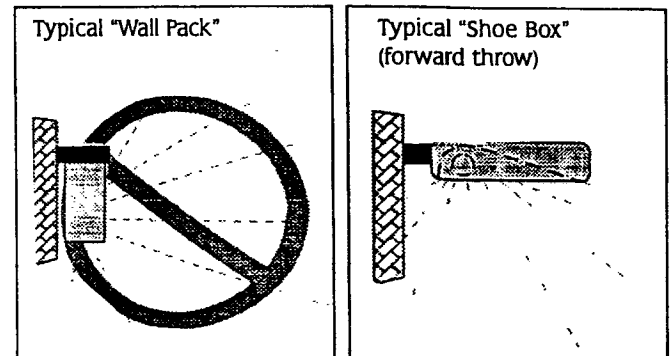
Energy Waste Many outdoor lights waste energy by spilling much of their light where it is not needed, such as up into the sky. This waste results in high operating costs. We waste over a billion dollars a year in the United States needlessly lighting the night sky.

Sky Glow Rays that beam uselessly above the horizon create murky skyglow – the "light pollution" that washes out our view of the stars.

How do I switch to good lighting?

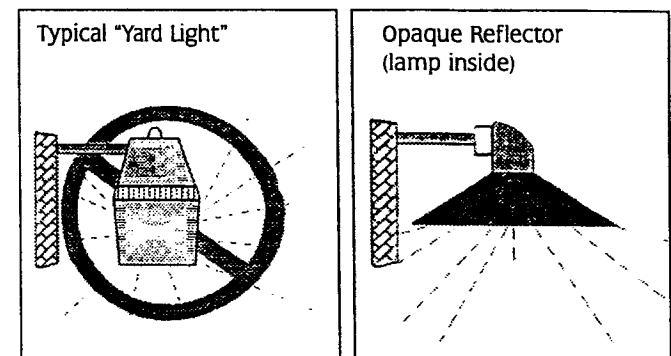
- 1 Provide only enough light for the task at hand; don't over-light, and don't spill light off your property. Specifying enough light for a job is sometimes hard to do on paper. Remember that a full Moon can make an area quite bright. Some lighting systems illuminate areas 100 times more brightly than the

Some Good and Bad Light Fixtures



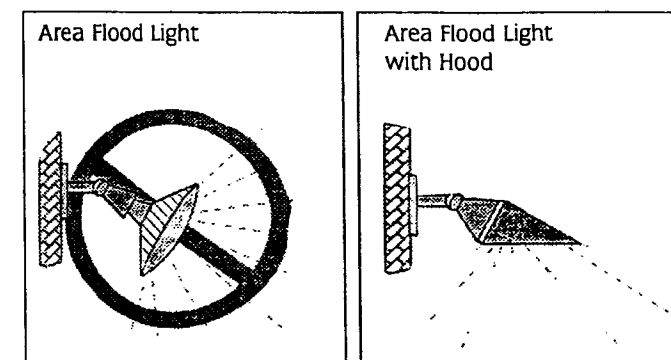
BAD

GOOD



BAD

GOOD



BAD

GOOD

full Moon! More importantly, by choosing properly shielded lights, you can meet your needs without bothering neighbors or polluting the sky.

2 Aim lights down. Choose “full-cutoff shielded” fixtures that keep light from going uselessly up or sideways. Such fixtures produce minimum glare. They create a pleasant-looking environment. They increase safety because you see illuminated people, cars, and terrain, not dazzling bulbs.

3 Install fixtures carefully to maximize their effectiveness on the targeted area and minimize their impact elsewhere. Proper aiming of fixtures is crucial. Most are aimed too high. Try to install them at night, when you can see where all the rays actually go.

Properly aimed and shielded lights may cost more initially, but they save you far more in the long run. They can illuminate your target with a low-wattage bulb just as brightly as a wasteful light does with a high-wattage bulb.

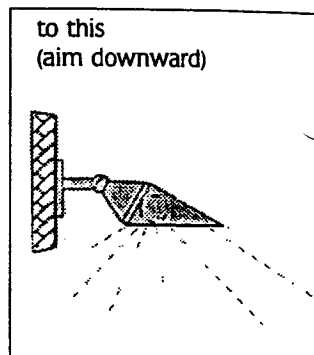
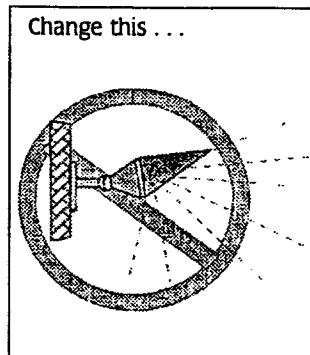
4 Choose energy-efficient low-pressure sodium (LPS) or high-pressure sodium (HPS) lamps wherever yellowish light will do the job. Use less efficient white lights only where ideal color rendition is important.

5 Where feasible, put lights on timers to turn them off each night after they are no longer needed. Put home security lights on a motion-detector switch, which turns them on only when someone enters the area; this provides a great deterrent effect!

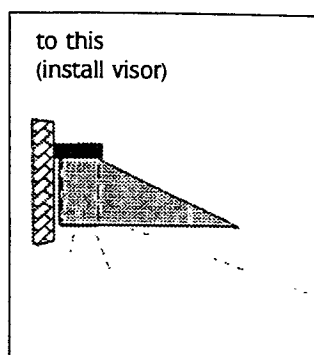
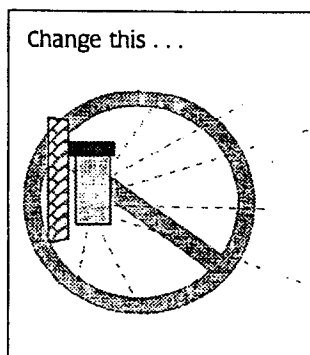
Replace bad lights with good lights.

You'll save energy and money. You'll be a good neighbor. And you'll help preserve our view of the stars.

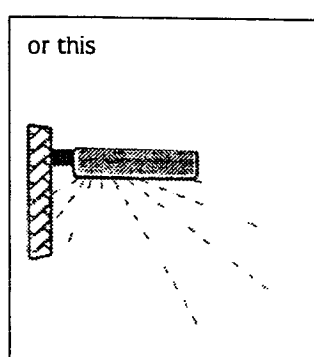
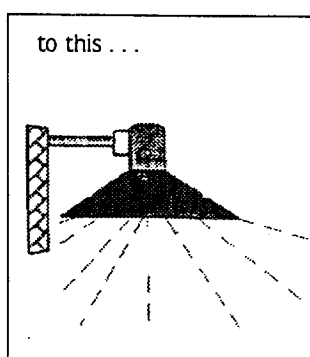
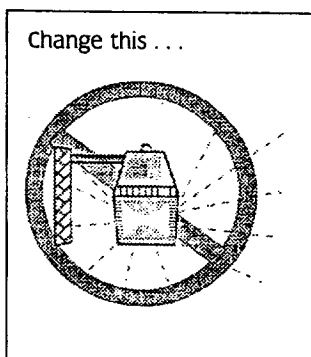
What You Can Do To Modify Existing Fixtures



FLOOD LIGHT



WALL PACK



YARD LIGHT

OPAQUE REFLECTOR

SHOE BOX

Presented by the

New England Light Pollution Advisory Group (NELPAG)

(<http://cfa-www.harvard.edu/cfa/ps/nelpag.html>) and

Sky Publishing Corp. (<http://www.skypub.com/>).

NELPAG and Sky Publishing Corp. support the

International Dark-Sky Association (IDA) (<http://www.darksky.org/>).

We urge all individuals and groups interested in the problems of light pollution and obtrusive lighting to support the IDA and subscribe to its newsletter. IDA membership costs \$30 per year; send your check to IDA, 3225 N. First Avenue, Tucson, AZ 85719, U.S.A.

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SPONSOR NEEDED

A new docent, Jackie Fondren, has developed a special children's handout for the Nature Center. Including word games and information, this clever piece of work will be given to kids along with their one million "Cachuma Bucks" when they answer questions correctly from the *Who Wants to Be A Millionaire* game in the Center.

Would you like to sponsor the printing of this item and have your name or the name of your business appear on the handout, e.g. **"This Printing Sponsored by Mr. Niceguys's Realty?"**

For printing of 2000, copies, the cost is \$245.00 Please call Linda Taylor at 693-0691 if you would like to take advantage of this opportunity for special support of the Nature Center.

DOCENTS ELECT OFFICERS

At their February meeting, the docents elected the following officers:

President; Barbara Gutmann
Vice President; Dick Cofiell
Treasurer; Don Wimpres
Secretary; Patricia Martin

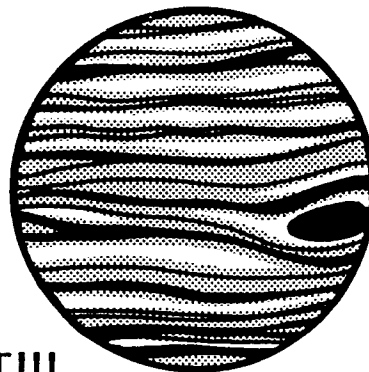
DATES TO REMEMBER

TROUT DERBY - APRIL 13 & 14

ZOO TO YOU - May 4, 11:00am & 1:30pm

DOCENT MEETING - MAY 11 at 10:00am

NOTE: THE APRIL DOCENT MEETING HAS BEEN CANCELED DUE TO THE TROUT DERBY.



PLANET ALERT!!!

ALL FIVE BRIGHT PLANETS CAN BE VIEWED SIMULTANEOUSLY AT DUSK IN LATE APRIL AND EARLY MAY.

Look for Mercury just above the western horizon with the very bright Venus just above it. Going higher we see a dim Mars and Saturn in the constellation Taurus, the bull. Higher above them in the sky is the bright planet Jupiter.

CACHUMA LAKE NATURE CENTER Executive Director: Linda Taylor

Board Officers

Marion Schlinger, Carol Smagala, Co-Presidents
Lynda Williams, Treasurer
Paul Roark, Corresponding Secretary
(Linda Taylor, Secretary to the Board)

Docent Officers

Barbara Gutmann, President
Dick Cofiell, Vice President
Don Wimpres, Treasurer
Patricia Martin, Secretary

The Nature Center can be reached at 805-693-0691, or clnatctr@sbceo.org

PLANT OF THE MONTH - LUPINES (*Lupinus*)



Nearly everyone is familiar with one of the members of the genus *Lupinus*, or the Lupine. The colorful flower stalks, rising well above the rest of the plant, are very conspicuous, and are, in general, different from other plants, so they are not often confused. If there is a confusion, look at the leaves and see if they are palmate (leaflets extending like fingers) in structure. Lupines are found from sea level to the highest peaks in the local mountains, and there are over two dozen species of Lupine in Santa Barbara County.

Lupines come in many colors, although they are usually bluish to purplish with white areas on the banner, which consists of the upper two petals of the flower. This color usually changes to reddish or magenta as the flower matures. Occasionally you might find a white lupine, and we do have several yellowish lupines in the area, one of which is intensely yellow. The Coastal Bush Lupine (*Lupinus arboreus*), which grows along the highway near Santa Maria, is unique in that it comes in two colors; yellow or blue-purple. In fact, the yellow ones occur mainly on the west side of the Highway 101 and the blue ones on the east side. Take a look on your next trip to San Luis Obispo.

Lupines are in the Pea Family and their fruits are typically little bean-like pods with several seeds. Some of the lupines are annuals, growing from seed every year, while others are a bush type and last for many years. We have tried to grow lupines in our Nature Center garden and did have a plot of Arroyo Lupine (*Lupinus succulentus*) for several years. Lately, in spite of much seeding, we haven't been able to establish a lupine plot.

We do have a False Lupine (*Thermopsis macrophylla*) in the area (on the north slopes of Figueroa Mountain), which has large yellow lupine-like flowers, but the leaves have only three leaflets rather than the five or more of the lupines.

Don Wimpress



**CACHUMA LAKE NATURE CENTER
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