



# crc's GREEN SCENE

A bimonthly newsletter of the Sustainability Committee at Cosumnes River College

## **CRC** Trailer to Demystify Solar Energy

Cath Hooper reports...

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#### **News In Brief:**

Recycling, Students Attend Sustainability Conference, Green Scene Awards

If you've been wondering where CRC is on the alternative energy front, I can report that interesting things are happening over in Construction Technology. Prof. Ryan Connally recently received grant money through SMUD's "Energize Minds for Solar Design" program to create an educational, solar-powered trailer. Construction Technology and related programs already visit many career-day events, and the solar trailer will help demystify the emerging technology of solar power for hundreds of students from middle school age up.

The \$10,000 project will place a solar array atop an existing tool trailer. With all the working parts exposed, students will be able to see easily how the photovoltaic (PV) system converts solar energy into electricity. Posters on display inside the trailer will further explain the science behind the photovoltaic effect.

On the practical side, the electricity produced will be used to power jobsite equipment, such as cordless-tool battery chargers, small portable power tools, and radios. On the impractical side—and to make the science more appealing to visiting students of all ages—the electricity produced will power a Wii and a 40" LED flat screen TV set up inside the trailer. What a kick to play (fill in the sport of your choice) on a Wii with power produced directly overhead! And what a great way to highlight the overall appeal of solar technology.

If you are interested in helping design and/or build the trailer system, you can join the Cosumnes Solar/Photovoltaic Club (next meetings are December 3 and 10, from 4-5pm in T118). The 15 current participants, both beginners and experienced folks, hale from the architecture, construction, construction management,

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## Student Club Plans Solar/PV Project

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environmental studies, and even biology departments.

So far the group, under Ryan's guidance, has completed some load calculations as well as some basic education about series and parallel circuits. Students hooked up small PV cells to turn small DC fans and joined many cells together in series to power a small radio. An industry professional attended the most recent meeting to

assist with the sizing of the array and battery. Remaining meetings will focus on identifying the system components so that they can be ordered over the winter break. In Spring 2010, the club will meet more frequently as the project moves into the fabrication and assembly phase, with testing and finalizing taking place in the latter half of the Spring semester.

Ryan sees the solar/PV project as just the first in a series of CRC green energy projects. He envisions future projects highlighting many of the technologies utilizing solar power, such as evacuated tubes for solar thermal or even solar ovens. In this way, we can be sure that CRC helps lead the way towards a time when, as Ryan put it, "we won't call it the green movement any more—it will just be the way we do things."

## Green Sleuth: Going Green with Your Pets Ruth Oxman reports...

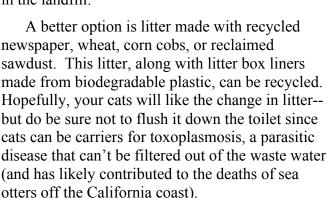
After all, you recycle cans, bottles, and paper, take reusable bags to the store, and place food scraps in the composter, so why not go green with your pets?

You walk your dog and, presumably, pick up the poop, but do you realize how much dog poop in plastic bags ends up in the garbage? According to Rebecca Skloot, a New Yorker, some 75 million dogs live in America. That's a lot of poop-filled plastic bags going to landfills across the country.

What should a dog owner do to prevent this? Experts recommend a couple of different options. Since most sewage-treatment systems can filter out the harmful bacteria, you can dump the waste down the toilet. You can also bury the waste in your yard at least 12 inches deep and then cover it with soil.

Cat owners can go green too. Many people place cat litter in the garbage, not realizing that most cat litter is made out of surface-mined bentonite clay or fuller's earth. According to the U.S. Geological Survey, nearly 2.5 million metric tons a year of these materials (about a quarter of

all available bentonite and half of all available fuller's earth in the US) are used as an absorbent for pet waste. Since the litter is nonbiodegradable, it ends up in the landfill.



Skloot, Rebecca. "When Fur Goes Green," Prevention.com, April 2008

Leibenluft, Jacob. "Dirty Dogs and Carbon Cats: The greenest ways to care for your pet." Slate.com, February 2009







#### Find A Good Home For Your Old Cell Phone







Susan Scott reports...

#### Did you know?

- Three billion people own cell phones.
- The average life span of a cell phone is only 18 months.
- 44% of old mobile phones are not recycled.<sup>1</sup>
- In the US, more than 2 million phones are tossed each week.
- More than 500 million old cell phones in the US are sitting on shelves or in landfills.
- Cell phones and accessories contain heavy metals such as cadmium, rhodium, lead, palladium, and beryllium – persistent bioaccumulative toxins (PBTs) that accumulate in fatty tissue of humans and animals

#### The Good News:

100 percent of the materials in a cell phone can be recovered. Over 60% of the materials can be reused to make new products; the remainder can be used to generate energy.<sup>1</sup>

Recycling cell phones would save 240,000 tonnes of raw materials and reduce greenhouse gases the equivalent of taking 4 million cars off the road.<sup>1</sup>

Cell phones can be reset, refurbished, and reused, and

usable parts from old phones can be reassembled to make new phones. These recycled phones enable people in developing countries to expand markets for their products, communicate with family members who have migrated to cities for jobs, and send money back and forth.

In many countries, cell phones are replacing the need to string miles of expensive wires through formidable mountains, deserts, or forest. Of course, keeping elephants away from a cell tower is a challenge – seriously!

#### OK – you're convinced that you should recycle your old phones, but how do you do it?

Staples stores accepts all makes and models of cell phones. PDAs, beepers, chargers, and batteries and recycles them through an organization called Collective Good. CG adheres to the Electronics Recycler's Pledge of True Stewardship, ensuring that hazardous materials do not get into the environment. They don't even have a dumpster at their facility. Other recycling options can be found at the Sacramento County Waste Management/ Recycling web site.

http://www.msa2.saccounty.net/wmr/Pages/cellphone.aspx

#### Find out more:

#### <sup>1</sup> Nokia USA

http://www.nokiausa.com/a bout-nokia/environment/ we-recycle/why-recycle

### Collective Good

www.collectivegood.com

## Recycle My Cell Phone campaign

http://www.recyclemycellphone.org



Two young men from Bhutan in traditional dress make connections via cell phone.
PHOTO BY SUSAN SCOTT



#### **Reader Reviews**

#### Magpie Café

Much has been made of Sacramento's growing number of quality eating places. For me and several of my CRC colleagues, the Magpie Café stands out among these notables not only for its cuisine but also for its commitment to principles of health and sustainability.



Drawing from local farms, ranches, and food companies, the Magpie Café uses a mix of organic, seasonal, and locallygrown produce to create deliciously fresh dishes (my favorite, the roasted mixed-vegetable platter, is to live for!). Moreover, owners Janel Inouye and Ed Roehr use seafood drawn from sustainable fisheries, and meats and poultry raised without hormones or antibiotics.

In addition to serving local and organic foods at the restaurant, the Magpie also offers catering services that make use of paper napkins and biodegradable plates, flatware, and cups. In either venue, you can enjoy healthy, inspiring food while feeling good about its journey to your plate.

So next time you think of dining out or having a catered

affair, consider going native (the yellow-billed magpie is native to the Sacramento area and the only bird found solely on the California mainland).

The Café is located at 14<sup>th</sup> & R streets. I'm headed there right now for an afternoon cup of coffee. And since it's November, my problem will be to decide whether to order a butternut squash mini-loaf or a pumpkin scone to accompany it. Such existential angst! I think I'll choose both. Hmmm, brilliant!

--Dennis Hock, English professor



#### The Late Show Gardens Event Showcases Sustainability

Recently, I worked an exhibit at The Late Show Gardens—an annual fall garden show where design meets sustainability—at Cornerstone Gardens in Sonoma. Designers, speakers, and vendors at the event focused on combining great design with sustainable practices.

My favorite exhibit was an ice sculpture (about 10 by 20 feet) whose melting waters ran into a garden of succulent

plants. A climate-change garden featured drought-tolerant plants, demonstrating that sustainable can be beautiful.

Planters made of recycled tires and old gasoline tanks showed interesting ways to recycle common household items. And for wine afficionados, corks as mulch—scattered around the top of the plant soil to prevent water evaporation and decrease water usage.

Lectures on sustainable topics included climate-change gardening, drought-tolerant gardening, native plant gardening, shrub gardening (which requires less water), and even fire-safe gardening, almost all to do with gardening in the midst of global warming.

The Cornerstone facility is open year-round, offering permanent and temporary exhibits as well as shops selling sustainable items and restaurants using only local foods and compostable plastics.

http://www.thelateshowgardens.org http://www.cornerstonegardens.com/

--Lizz Gaylord, student





#### **Reader Reviews**

#### **Library Inspires Student**

As a CRC student and a big fan of public libraries, I attended August's grand opening of the Valley Hi-North Laguna Library, directly across from campus, and I've been back twice a week ever since. This high-tech, green facility is the first LEED gold-certified branch of the Sacramento Public Library.



The \$18 million project was funded by the Sacramento City Community Reinvestment Capital Improvement Program. A team of architects, designers, and landscape architects designed the 20,300 squarefoot library to be energy efficient with a natural ventilation tower, efficient lighting, and a highly-efficient air conditioning and heating system. The surrounding landscape includes drought tolerant plants and a rainwater filtration roof system.

A massive window, designed to mimic daytime conditions without artificial lighting, marks the entrance to the library. The facility itself includes a food-court area, three study and tutoring rooms, separate children's and teens' reading sections, free Wi-Fi and public computers, a community meeting room, and self-checkout machines for library materials.

Just outside the library is a nice park with tot-lots for children to play, picnic areas for families to gather, and an area to read that book you just checked out.

I highly recommend you visit Valley Hi-North Laguna Library to immerse yourself in its collection of 70,000 books, DVDs, CDs, and periodicals, as well as to admire this new sustainable facility.

--Trang Tran, student

#### **Book Review:**

101 Ways You Can Help Save the Planet Before You're 12!

Joanne O'Sullivan has written a new book that informs young people about their ability to institute change and inspire others to help save the planet. It begins with a description of eco-types, from the 'nature kid' who enjoys camping and hiking to the 'science-fair star' who hopes to invent the best way to harness power from the sun.

Even someone who hasn't yet discovered a passion for

recycling will find a way to make a difference. 101 Ways You Can Help Save the Planet Before You're 12! includes the following suggestions we can all try:

#17 "Check it Out" suggests library books as a great way to recycle and reuse.

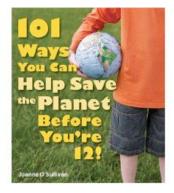
#19 "Make a Solar Oven" gives complete instructions for cooking foods like cookies or nachos that require low to medium heat.

**#34** "Calculate Your Carbon Footprint" features four helpful websites.

#71 "Think Like A Squirrel" explains how to can your own jam or tomato sauce.

Young people like knowing their actions and ideas can make a difference, so look for this new book filled with doable, inspiring suggestions.

--Ruth Oxman, Child Development professor



Editors' Note: We welcome green-related reviews (films, books, restaurants, etc.) from the campus community.



#### **Cosumnes River College Sustainability Committee**

#### **Members:**

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#### **Student Members:**

Elizabeth Gaylord Trang Tran

#### **Newsletter:**

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We're on the Web!

Look for archived issues
of the

GREEN SCENE
on the CRC homepage.

## CRC'S GREEN SCENE

#### **News In Brief...**

#### **Recycle Reminders**

Do you know what materials go into the recycling bin? Most folks know about the obvious items such as paper, empty glass containers, paper cups, and plastic bottles.

But recyclable items *also* include metal lids from jars, coffee-cup lids, food containers that are empty and rinsed (but not necessarily spotlessly clean), styrofoam (with a recycling symbol), and deli containers.

Remember: no wet or soiled paper towels or facial tissue.



#### "This Way to Sustainability!"

Nov. 5-8, CSU Chico hosted 1,600 people at its 5th annual sustainability conference, "This Way to Sustainability!" Ten CRC students attended with Prof. Debra Sharkey.

Students attended presentations on a range of topics, from a sustainability program in Kenya to a hands-on composting class. Other talks addressed food security, water privatization, renewable energy, and much more. Keynote presentations included a lively one by the infamous Captain Paul Watson, a staunch defender of marine mammals and star of Animal Planet's "Whale Wars."

CRC students also toured the Sierra Nevada Brewery to learn about its sustainable business practices: it diverts 99.5% of its waste from landfills and generates 85% of its own energy using fuel cells, 10,000 solar panels, bio-diesel, and bio-gas.

Hosted annually by CSU Chico and Butte CC students, the conference

organizers modeled the sustainable practices being preached. Programs were printed on 100% recycled, chlorine-free paper using renewable energy, and recycling and compost bins were visible around campus.

CRC students had a great time and learned many tips to lessen their environmental impact.



#### **Green Scene Awards:**

#### Kudos to...

 CRC Librarians for their new paperless newsletter. Library Lines is now a weekly online blog on the Student Services menu of the CRC homepage.



- Prof. Karena Benskin (Business) for her work mentoring SIFE club students to develop a plan to raise money from local businesses to buy integrated recycling/waste bins for campus.
- Christina Ocrant and Prof. Debra Sharkey for setting up the Employee Sustainability Pledge web site.
- Prof. Colette Harris (Communications) for incorporating a 'Go Green' choice in her class project.
- Julie Elliott and CRC Printing for promoting two-sided copying and for increasing awareness of the mammoth number of copies made on campus.
- Chris Corona and the Student Development office for the new paperless version of *The River Hawk*.