

San Diego

# Earth Times

Special Earth Day Issue

April 2012



## EarthFair in Balboa Park

*Sunday, April 22 – “It’s Our Nature”*

*SAVE EARTH DAY – see page 19*

## Home energy check-up

*Simple things – big savings*

## Climate, carbon and politics

*How a carbon tax that PAYS YOU  
could help climate change*

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# Your Nature

by Carolyn Chase



This year’s Earth Day theme is “It’s Our Nature.” It’s our nature. That is to say, it’s human nature to build and explore. Especially in the 20th century, it’s our nature to transform massive areas on the earth for our own uses.

It’s our nature. That is to say, all life is dependent on the natural world: all the “functions” of plants and animals that create and maintain the atmosphere, the flows of water and waste and food. It’s completely in our interest to conserve and protect nature and the natural functions of earth.

But also, it’s our nature to ignore the important in favor of the convenient. Rather than conservation being a valued and protected part of our culture, we need to have things like “Earth Day” because we need to be reminded. We need to join together and spread the word.

And so, those of us who want to help create a clean, healthy environment will gather at the 23rd annual EarthFair in Balboa Park on Sunday, April 22 from 10am - 5pm. More than 350 organizations - the EarthFair exhibitors - will be present to help spread the word in a way that makes a tangible difference. Five entertainment venues, the Children’s Earth Day Parade and activity area, an energy-efficient vehicle show and eco-friendly foods make for a great day in the park for the whole family.

If just attending the event isn’t enough for you, step it up by volunteering. EarthFair is produced by volunteers both at the event and before. Volunteer online at EarthDayWeb.org, or call 858-272-7370 if you’re interested in an advance job or special project. If you can’t volunteer for Earth Day on the 22nd, or attend and find a new connection in person, visit the San Diego EarthWorks website at EarthDayWeb.org and browse the EarthFair online exhibitors list where you can find a new volunteer niche online.

Human nature can also be our undoing. It’s our nature.

Consider climate change. Everyone agrees that the geography of the earth has changed greatly over time. Everyone agrees that there have been ice ages and warmer ages in earth’s past. Whether or not it’s being caused by human industrial activities, or caused by an Almighty Being, shouldn’t the discussions be about how to address the challenges?

But it’s not. It’s decidedly not. We’re still having to fight against massive new pipelines and dangerous oil drilling schemes.

We take for granted most of the scientific progress we enjoy. Yet we tolerate a political culture that is actively turning away from science, cutting scientific research and education, and denying widely-held scientific truths about earth’s natural systems.

The human response needs to be to rise to the challenge, rather than arguing over it, or making it actively worse. We are ill-prepared to overcome the influence of billions of dollars from commercial interests. But if you do care about nature and America, you must surely see that the only way to overcome that influence will be through the actions of millions – yes millions – of Americans using the tools of democracy. We’ve seen how it is done around the world: massive, persistent protests. We have only to organize them here. It needs to

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**Cover photo by Carolyn Chase:** Seljalandsfoss waterfall of the river Seljalandsá in Iceland is 130 feet (40 m) high and is the only waterfall there – among hundreds – that it is possible to walk behind. Iceland is vulnerable to climate warming. About 10 percent of the land is covered in glaciers, and will be greatly affected by increased melting ice and changing weather patterns. Icelanders’ knowledge in harnessing renewable energy, especially geothermal energy, has already been disseminated to many parts of the world, and exportation of that know-how could prove to be Iceland’s greatest contribution to the campaign against climate change.

## San Diego Earth Times

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### Staff

Editor/Publisher: Chris Klein  
 Editor/Features: Carolyn Chase  
 Assignments: Alice Martinez  
 Proofreaders: Liz Dexia

### Communication

Mail: P.O. Box 99179  
 San Diego, CA 92169  
 Phone: (858) 272-7423  
 Email: [sdet@sdearthtimes.com](mailto:sdet@sdearthtimes.com)  
 Twitter: SDEarthDay  
 Facebook: San Diego EarthWorks

# Taking the Lead on Sustainability...

At Walmart, we know that being an efficient and profitable business and being a good steward of the environment are goals that can work together. That's why we have simple and straightforward goals for our company:

- ☀️ to be supplied 100 percent by renewable energy;
- ☀️ to create zero waste; and
- ☀️ to sell products that sustain people and the environment.

Below is a look at how we are working to fulfill these goals in San Diego.

- ☀️ Walmart is set to expand our solar panel program to **75 percent of California stores** by 2013 including the following stores in San Diego: Aero Drive, Chula Vista, College Grove, Eastlake, National City, Oceanside, Poway, San Marcos and Santee.
- ☀️ In 2011, Walmart associates volunteered at **GRID Alternative's first ever San Diego Solarthon**, where they installed solar panels on several low-income homes in City Heights.
- ☀️ Walmart also donated a truck to the California Center for Sustainable Energy for its **Mobile Energy Education trailer**.



## Envisioning a Sustainable Future

[www.walmartsandiego.com](http://www.walmartsandiego.com)

## Give your home an energy check-up

THERE ARE SOME EASY THINGS YOU CAN DO TO REDUCE ENERGY USAGE, SAVE MONEY AND HELP CONSERVE NATURAL RESOURCES.

**K**nowing how much energy you use at home is the first step to understanding how to save. Take our Home Energy Efficiency Survey and get a customized report with energy-saving recommendations in just 25 minutes. Visit [sdge.com/saveenergy](http://sdge.com/saveenergy) to complete your survey today and to learn more about the rebates and services we offer.

Or call us 1-800-411-7343 for a free, mail-in Home Energy Efficiency Survey. It takes only a few minutes to complete and return. We'll analyze the energy usage in your home and mail you the results.

### Your water heater and faucets

One leaking drop of hot water per second can waste more than 500 gallons per year. If just 1% of SDG&E customers repaired a leaky hot water faucet, the savings would add up to 20 million gallons of water, and enough natural gas savings to heat 1,000 homes all winter long.

#### Use cold water

When you can, use cold water to wash clothes or rinse dishes.

#### Running your dishwasher

Wash full loads and use the energy-saver setting for an additional savings. Use your dishwasher's booster heater; it heats the water used in the dishwasher to 140°F, allowing



A water heater blanket on an older heater can save up to 9% of your water-heating costs.

you to set your water heater at an energy-efficient 120°F.

#### Keep it warm

If your older water heater feels warm to the touch, buy a water heater blanket and save up to 9% on your water-heating costs. Check the caution label on your water heater. Newer models come with proper insulation and some even prohibit installing a blanket. Finally, don't cover the inspection plate with the blanket: it could be a fire hazard.

#### Install low-flow devices

Low-flow devices on your faucets and showers can cut up to 11% of your water use, reducing your energy and water bills.

### Your lights

Lighting can account for about 20% of your monthly bill. Saving energy in lighting costs can be as easy as replacing incandescent light bulbs with compact fluorescent lights (CFLs), which use 75% less energy and last up to ten times longer. If you're planning to light your landscaping, install low-voltage lighting wherever possible.

If each household in San Diego replaced four 100-watt incandescent lights with equivalent 23-watt compact fluorescent lights CFLs, 292,000 kilowatt hours would be saved each year. That's enough to power more than 60,000 homes for a year.

#### Motion sensors make sense

Replace light switches with motion or occupancy sensors. Lights will go on or off when someone enters or leaves a room. Motion sensors are perfect for the garage, exterior or security lighting.

#### Let timers take on the task

If you sometimes forget to turn off the lights, think about buying a timer to turn lights off and on automatically.

#### Try photocells

Photocells automatically turn on your lights when the sun goes down. When the sun rises, the photocell turns the lights off. They're great for outdoor or security lighting.

*provided by San Diego Gas & Electric*



Up to 20% of your heating can be lost through your ceiling. Proper insulation can significantly cut these losses.

### Your heating system

In the winter, your heating system is probably your biggest energy user, accounting for 13 to 16% of your monthly bill. If we all turned down our thermostats just two degrees, we'd save enough energy to heat 2,700 San Diego homes for a day.

#### Choose the correct temperature setting

For every two degrees you lower your thermostat you can save approximately 5% percent on your heating costs. You can save even more by using a programmable thermostat to adjust the temperature to energy-saving settings throughout the day.

If you have a heat pump, raising and lowering the thermostat could cause the electric heating strips to come on, significantly increasing your heating costs.

Finally, never turn your thermostat up to high to heat a home in a hurry. It won't heat your home any faster – and you'll be using more energy.

#### Beware of portable space heaters

Space heaters are best when you're trying to heat just one room. If you use more than one space heater, you may use more energy than your gas furnace to heat your entire home.

#### Don't let heat escape

Keep doors and windows closed on chilly nights. Weatherstripping and caulking your doors and windows can save as much as 6%

(Continued on page 6)

# Energy checkup

(cont. from page 5)

of your heating costs.

## Don't block heating vents

Check to see that heating vents are unobstructed so your system isn't overworked.

## Keep it clean

Check filters at least twice during the heating season and either vacuum or replace them. It's a good idea to have your entire system checked yearly by a qualified heating contractor.

## Insulate your home properly

Up to 20% of your heating can be lost through the ceiling. Proper insulation will keep your home warm in the winter and cool in the summer. The insulation "R" rating stands for resistance to heat flow. The higher the "R value," the greater the insulating power.

## Your air conditioner

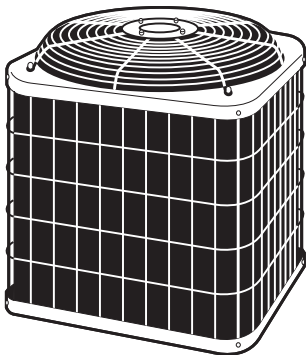
By using fans instead of central air conditioning, you can save 80 to 90% on cooling costs. In fact, if every San Diego residence used fans instead for just three hours on one warm summer day, the energy saved could power more than 10,000 homes for a full month.

## Shade your house

Use landscaping, awnings and overhangs to provide shade around the outside of your home. A shaded house is easier to cool than one in direct sunlight.

## Maintain it

Proper maintenance helps your air conditioner run more efficiently. In addition to regular do-it-yourself maintenance, it's a good idea to have your entire system checked yearly by a qualified air-conditioning contractor.



Keep air conditioning vents clear to avoid wasting energy.

## Keep the vents clear

An obstructed vent, inside or outside your home, wastes both energy and money. Move furniture away from vents and window air conditioners. Trim shrubbery that might block outside vents.

## Do your homework

Important factors to consider when shopping for a new air conditioner are: size of area to be cooled, climate, your home's construction, sun exposure, wiring, insulation, and the number and location of windows. Once you have this information, determine which unit will cool your home for the lowest cost.

## Set it and leave it

The best temperature for your air conditioner's thermostat is 78°F or higher. A setting of 78°F instead of 72°F can save up to 12% of your cooling costs.

## Watch those windows

Install reflective films or solar shade screens on windows with the greatest exposure to the summer sun.

## Keep cool air in

Keep your doors and windows closed when you have the air conditioner on. Also weatherstrip and caulk your doors and windows to seal in cooled air.

## Your refrigerator & freezer

Chances are your refrigerator/freezer is one of the largest energy users in your home, gobbling up about 20% of your household's annual energy costs. If every household in the United States used high-efficiency refrigerators, the electricity saved would eliminate the need for about eight large power plants.

## Keep it in good shape

A refrigerator works best when it's kept in good condition. Check the door seals. If they're cracked or you feel cold air leaking out, they should be replaced.

## Keep it cool

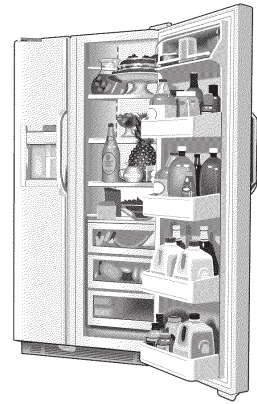
Keep your refrigerator in a well-ventilated, dry and cool space. Refrigerators and freezers near ovens, stoves, water heaters, clothes dryers or other crowded or warm places have to work harder.

## Unplug it

If you have an extra refrigerator or freezer and don't keep it full, you could save up to 15% by unplugging it;

## Use the right settings

Check your thermostat controls. To work most efficiently, your refrigerator should be set between 36°F and 40°F. The freezer tem-



Refrigerators operate most efficiently when they are full, but not overloaded. Who knew?

perature should be set from 0-5°F.

## Defrost regularly

If you have a manual defrost freezer, don't forget to defrost regularly. More than 1/4 inch of frost makes your freezer work harder to keep your food frozen.

## Keep it clean

Dirty condenser coils could lead to higher operating costs. Coils, found on the back or bottom front of your refrigerator, should be checked and cleaned at least twice a year.

## Keep it closed

A refrigerator works more efficiently when you open its door as little as possible. So make your decisions before opening the door and get everything you need quickly and at one time.

## Keep the heat out of your refrigerator

Before you store leftovers in the refrigerator or freezer, allow them to cool slightly. That way, your refrigerator or freezer won't have to work to cool them off.

## Keep it full

Refrigerators operate most efficiently when they are full, but not overloaded. While it's true that frozen foods help to keep the air cool, over-packing food in either compartment can prevent cold air from circulating properly. Refer to your owner's manual for the correct capacity.

## Your washer & dryer

If you wash two loads of laundry per week and switch from hot to cold water, you can save energy. If just 10% of San Diego County households did this, we could reduce our collective natural gas usage by more than half a million therms each year. That's enough

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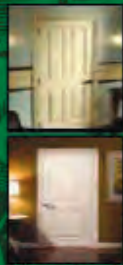
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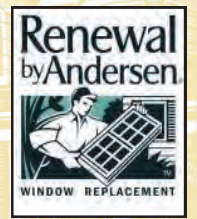


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# Let the sun shine!

by Masada Disenhouse and Pete Hasapopoulos

In mid-January, in front of the new SDG&E energy innovation center in Kearney Mesa, sixty enthusiastic protestors representing SanDiego350.org, Sierra Club San Diego, Women Occupy San Diego, and the Green Party as they sang “SDG&E, Please Don’t Take My Sunshine Away.” They were there to protest SDG&E’s proposed “network use charge,” which would increase rates for customers who generate their own electricity – primarily homes and businesses with solar photovoltaic panels. This solar tax would dramatically stunt the growth of rooftop solar, kill countless jobs in the local solar industry, and would be disastrous for cities and school and water districts who have invested heavily in solar power.

## San Diego leads in solar

Widespread expansion of rooftop solar is key to reversing climate change and building an environmentally sustainable economy. San Diego is a national leader in residential and commercial solar power. Our region has more than 15,000 solar systems and a thriving solar industry that creates local jobs. What we need are more incentives for renewable energy like solar – not fewer!

Fortunately, on the same day of the pro-

test the California Public Utilities Commission rejected SDG&E’s anti-environmental proposal. Unfortunately, SDG&E is not going to give up their attempt to control the electricity market for the benefit of their shareholders. They will try other approaches to increase the cost to customers using solar. Combating climate change is not SDG&E’s higher calling.

Every San Diegan should have access to local, affordable clean energy. SanDiego350.org and Sierra Club San Diego Chapter have joined forces to build a movement to ensure that renewable energy gets all the support it needs, and that SDG&E does not succeed in obstructing it.

Their goal is to build a network of individuals and organizations within our region to support a clean energy path for the future based on efficiency, building retrofits, and rooftop solar. They will advocate for supportive local and statewide policies, such as



expansion of net-metering, FIT (feed-in-tariff), PACE (Property Assessments for Clean Energy), and Community Choice Aggregation (an alternative to SDG&E).

For information, or to join the growing movement, visit [SanDiego350.org](http://SanDiego350.org) or call the Sierra Club office at 858-569-6005. Solar owners are especially encouraged to sign up so they can stay updated about SDG&E’s maneuvers that may affect them.

Join in, and let the sun shine! **ET**

# Naval Base Coronado’s Green Energy Initiative

by Mass Communication Specialist 3rd Class Stephen Votaw

The Navy is continuing to progress in “going green” aboard Naval Base Coronado. Construction of 15 solar panels along the bay front scheduled to be complete in late February.

The solar panels will produce approximately four hundred-thousand kilowatt-hours

of energy per year. This will add to the four million kilowatt-hours already going into the Navy grid. Their energy initiatives will save approximately \$500,000 a year in power purchase costs.

“As part of the Navy’s energy initiative we constructed 15 solar panels, called solar trees, that will rotate with the sun throughout the day,” said Lt. j.g. Brett Sauers, the assistant public works officer for Naval Base Coronado. “Each of the solar trees will convert enough solar energy during a single day to power three to four standard households.”

Sauers went on to explain how the solar trees come with charging stations for the Navy electric or hybrid cars.

Fred Speece, the Resource Efficiency Manager for Naval Base Coronado, has been working to convert the base to more energy efficient power sources over the past several

years. “It’s pretty exciting to be in this field,” said Speece. “Helping to reduce the energy we use, whether it’s through placing better, more efficient lighting in our buildings, or helping with the construction of solar panels around the base that convert sunlight into real usable energy, is one of the most rewarding jobs I could ever imagine doing.”

The base’s switch to green energy, along with the ground-breaking for a 118-acre solar farm at Naval Air Weapons Station China Lake in January 2012, are part of the Navy’s green energy initiative, laid out by Secretary of the Navy Ray Mabus in 2009. This initiative aspires to achieve 50 percent of the Navy’s shore-based energy requirements produced by alternative sources by the year 2020. **ET**

Provided by Navy Public Affairs Support Element West.

## How to Save the Earth

- 1) Go to [EarthDayWeb.org](http://EarthDayWeb.org)
- 2) Click the link under the blue “Volunteering”
- 3) Read the EarthFair job descriptions
- 4) Signup to volunteer
- 5) Go to a training
- 6) Do your job at EarthFair
- 7) The Earth is saved!

That wasn’t so difficult now, was it?

# SDG&E Receives Climate Leadership Award

provided by SDG&E

**S**an Diego Gas & Electric (SDG&E) was nationally recognized with the **Organizational Leadership Award** at the inaugural Climate Leadership Awards.

The Climate Leadership Awards recognize organizations that go beyond business as usual in the management and reduction of greenhouse gas (GHG) emissions. The awards are presented by the US Environmental Protection Agency (EPA), the Association of Climate Change Officers (ACCO), the Center for Climate and Energy Solutions (C2ES)

(formerly the Pew Center on Global Climate Change), and The Climate Registry (TCR).

The **Organizational Leadership Award** recognizes organizations for exemplary leadership, both in their internal response to climate change, and through engagement of their peers, competitors, partners, and value chain.

SDG&E supports reducing greenhouse gases through its goals related to air quality and energy efficiency, natural resources, and other areas, including waste reduction and recycling. The company continues to focus

on achieving aggressive targets for renewable energy procurement, delivering innovative energy efficiency customer programs, and encouraging the use of alternate fueled vehicles, among other initiatives. **ET**

*SDG&E is a regulated public utility that provides energy service to 3.4 million consumers through 1.4 million electric meters and more than 850,000 natural gas meters in San Diego and southern Orange counties. The utility's area spans 4,100 square miles.*

## Energy checkup

(cont. from page 6)

to provide all the natural gas needs to over 900 homes each year.

### Wash and dry full loads

More than 70% of the cost of washing a load of laundry is in heating the water. Wash full loads to get the most for your money.

### Use cold water as often as possible

Save washing in warm water for whites or hard-to-clean items. Clothes washed in

cold water fade less and have fewer wrinkles. Always rinse in cold water.

### Get the lint out

Clean your dryer's lint screen after every use. A lint-free dryer works much more efficiently.

### Check your connections

Check for hose cracks and leaky faucet connections. Either one can cause you to lose

hot water every time you wash.

### Your oven & range

Don't pre-heat if you don't have to. If you're baking breads and cakes, pre-heating your oven may be necessary. For most foods, like casseroles and broiled items, pre-heating simply isn't necessary.

(Continued on page 12)



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GLOBAL  
SOCIAL  
RESPONSIBILITY

## San Diego Zoo Global to conserve wildlife habitat through partnership

**S**an Diego Zoo Global has joined forces with Nature and Culture International to conserve millions of acres of tropical forest and wildlife habitat. The two organizations are collaborating on four initial projects, in Mexico and South America, to improve the future for animal species and local people by protecting the healthy ecosystems on which both depend.

“By combining the expertise and efforts of our two organizations, we begin a pioneering conservation partnership that addresses the needs of both humans and wildlife,” said Rick Gullely, President, San Diego Zoo Global. “Our initial projects in Mexico, Peru, Ecuador and Colom-

bia will pair the Zoo’s expertise in species conservation with the successful habitat preservation models developed by Nature and Culture International, in partnership with local people.”

In 2011, the San Diego Zoo Global Wildlife Conservancy announced expansion of its international conservation program by assuming operation of Cocha Cashu biological station in Manu National Park, Peru. San Diego Zoo Global’s partnership with Nature and Culture International links the Zoo with an organization that has been working with governments and people in developing countries to conserve key habitats for 15 years. Those efforts have led to the preservation of 7.7 million acres of rainforest and prime wildlife habitat in Latin America. Though its Wildlife Conservancy, the Zoo will contribute its expertise in species management and recovery as part of the combined effort.

“This partnership is a natural extension of the great work of San Diego Zoo Global to bring endangered species back from the brink of extinction,” noted Ivan Gayler, the founder of Nature and Culture International and the 2010 recipient of the Zoo’s Conservation Medal. “The Wildlife Conservancy’s contribution to understanding the flora and

fauna of threatened tropical ecosystems and applying that knowledge to the sustainable use of forest resources by local people will certainly enhance the productivity of our mutual work protecting landscape-scale habitats for the generations to come.”

Established in 1997 and based in San Diego, Nature and Culture International is most active in four Latin American countries where the initial partnership projects will be implemented: Ecuador, Peru, Mexico, and

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*For every dollar invested, no other organization conserves more land. In 15 years, Nature and Culture has, with a total budget that has averaged less than \$2 million a year, catalyzed the protection of 7.7 million acres of tropical rainforest and other threatened wildlife habitat.*

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Colombia. Responding to the desires of communities in those countries, the organization provides the technical, educational, financial and legal assistance that enables governmental entities to formally create – and local people to actively protect – large threatened ecosystems characterized by exceptional species diversity and endemism – species not found elsewhere.

“Nature and Culture International has done a tremendous job of preserving important habitat areas,” said Dr. Allison Alberts, Chief Conservation and Research Officer for San Diego Zoo Global. “Together we will learn even more about the species living in these areas and understand better how to ensure their conservation in the wild.”

### Projects fighting species extinction

The San Diego Zoo Global Wildlife Conservancy is dedicated to bringing endangered species back from the brink of extinction. The work of the Conservancy includes on-site wildlife conservation efforts at the San Diego Zoo, San Diego Zoo Safari Park, San Diego Zoo Institute for Conservation Research, and international field programs in more than 35

*provided by Nature and Culture International*

countries. In addition, San Diego Zoo Global manages the Anne and Kenneth Griffin Reptile Conservation Center, the Frozen Zoo™ and Native Seed Gene Bank, the Keauhou and Maui Hawaii Endangered Bird Conservation Centers, San Clemente Loggerhead Shrike Breeding Facility, Cocha Cashu Biological Research Station, the Desert Tortoise Conservation Center, and a 900-acre biodiversity reserve adjacent to the San Diego Zoo Safari Park. The important conservation and scientific work of these entities

is supported in part by The Foundation of the Zoological Society of San Diego. More information about the San Diego Zoo Global Wildlife Conservancy can be found on its website,

[www.sandiegozooglobal.org](http://www.sandiegozooglobal.org).

A small group of deeply-committed donors has made Nature and Culture International one of the world’s most productive organizations in protecting tropical forest habitats. For every dollar invested, no other organization conserves more land. Over 15 years, Nature and Culture has, with a total budget that has averaged less than \$2 million a year, catalyzed the protection of 7.7 million acres of tropical rainforest and other threatened wildlife habitat. Its approach of actively listening to the desires of local people in Latin America has garnered exceptional support in those countries and led to the creation of national, regional, and indigenous community reserves, locally-funded municipal watershed reserves, and a United Nations Biosphere Reserve. More information is at [www.natureandculture.org](http://www.natureandculture.org). **ET**

*Nature and Culture International also built and operates the San Francisco Scientific Station high on the northern edge of Podocarpus National Park in Ecuador. Here, the German Research Foundation and 25 universities and scientific institutes conduct the largest tropical mountain ecology research program in the world, investing an average*

(Continued on page 12)

# A HEALTHY APPROACH TO DENTAL CARE

Do you believe in alternative medical treatments, healthy eating, and a holistic approach to life? Natural, Holistic Dentistry may be right for you!

Looking for an alternative dentist to match your healthy lifestyle? At The Center for Natural Dentistry, we use alternative, holistic approaches to dentistry to help solve the root cause of your dental problems, rather than just masking the symptoms.



Dr. Godes, Biological Dentist Dr. Marvin, IABDM Board Certified Biological Dentist, Author

## Our patients benefit from our expertise in:

- Ozone Therapy
- Safe Mercury Removal
- Safe Root Canal Extractions
- Homeopathics
- Biocompatibility Testing
- Cavitation Surgery
- Holistic Cleanings
- Low Radiation 3D Cone Beam X-Rays
- Muscle Testing
- Biocompatible Ceramic Dental Implants
- One-Visit Ceramic Crowns
- Fluoride free
- Bpa-free fillings
- Metal free braces
- Safe sedation dentistry available
- Holistic Dentistry for Children

For a **FREE Consultation or 2nd Opinion AND a free bottle of our all-natural mouthwash, visit [SanDiegoNaturalDentist.com](http://SanDiegoNaturalDentist.com)**

"I hadn't been to the dentist in a long time, after some bad experiences, so I was nervous to go back. Dr. Marvin and his entire staff have been wonderful and made my fears go away! I had my mercury fillings removed and my mouth is on it's way to healthy. I am so happy that I chose Dr. Marvin's practice. I would highly recommend this office to everyone-it's like no other dental practice!!!"  
~Kurstin T., San Diego, California

"I started crying actually on my first visit, and Dr. Marvin said 'are you okay?' and I said 'I am amazing, because I found the place I am supposed to be. That's how much it moved me... it was really a great experience.'"  
~Liza F, San Diego, California

"I just want to say Thank you for doing what other dentists are afraid to do. Going Natural and caring about the wellness of your patients!"  
~Rich W, Dallas, Texas

For more information about how you can improve your health through holistic dentistry, visit us online at [SanDiegoNaturalDentist.com](http://SanDiegoNaturalDentist.com) or [Facebook.com/NaturalDentistry](https://www.facebook.com/NaturalDentistry).

Join our email newsletter for a free copy of our amalgam guide, *Dr. Marvin's Safe Dental Materials List*, and Much, M uch more!

Get your dental questions answered LIVE every Saturday during Let's Talk Dentistry with Dr. Marvin on KPRZ 1210 AM in San Diego!

**760-536-6795**

Meet Dr. Marvin and Dr. Godes at the San Diego Earth Fair in April.



# Saving species means addressing overpopulation

**A** new study published in the Inter-Research Marine Ecology Progress Series finds that despite the increases in protected land and marine areas in the world, human population growth is preventing efforts to stem the decline of biodiversity. The study looked at more than 10 million square miles of protected lands, and 1.2 million square miles of protected oceans worldwide.

Its findings? The accelerating pace of new protections has not made up for the loss of species. Quoting from the abstract, “the

## SD Zoo Global

(cont. from page 10)

*of more than \$3 million a year in interdisciplinary research on tropical mountain forest ecosystems. An agreement is in the works to extend and expand that program for an additional decade. More detailed information about numerous Nature and Culture projects, including those at the San Francisco Scientific Station, can be found at [www.natureand-culture.org](http://www.natureand-culture.org).*



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current pace of the establishment of new, protected areas will not be able to overcome current trends of loss of marine and terrestrial biodiversity.”

The researchers make clear that they’re not advocating the abandonment of protected areas, especially where critical habitat could stabilize an endangered species. However, those areas don’t always protect other species from people’s impact. It behooves us to take other steps as well – to slow human population growth and resource consumption.

You can find the study at [www.int-res.com/abstracts/meps/v434/p251-266/](http://www.int-res.com/abstracts/meps/v434/p251-266/).

*by Center for Biological Diversity*

In response to the birth of the 7th billionth person last year, the Center for Biological Diversity is undertaking a “7 billion campaign.” They will continue to find opportunities to protect integral habitat for declining species.

It’s vital that we also take steps now to address one of the biggest drivers in the extinction crisis: the population bomb known as *Homo sapiens*. **ET**

*The Center for Biological Diversity works through science, law and creative media to secure a future for all species, great or small, hovering on the brink of extinction. [www.biologicaldiversity.org/](http://www.biologicaldiversity.org/)*

## Home energy checkup

(cont. from page 9)

### Keep your oven & range clean

An oven or range that’s free of grease and baked-on residue will work more efficiently.

### Buy gas appliances

If you’re in the market for a new range or oven, consider buying gas. They cost less to operate than electric appliances, and are usually on for less time.

### Use your microwave oven

Your microwave requires about the same amount of energy per hour to operate as your electric oven, but it cooks food much more quickly. It saves you time and up to 75% of energy costs. (In contrast, a gas oven costs about 50% less to operate than an electric oven.)

### Cover it up

Covers and lids on your pots and pans

trap steam to cook food faster.

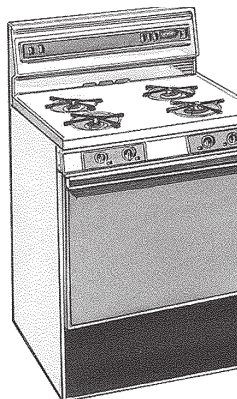
### Cook smaller meals in smaller appliances

For smaller meals that can’t be cooked in a microwave, use an electric skillet, broiler oven or toaster oven. They use half the energy of their full-size electric counterparts, and don’t heat up your kitchen in the warmer months.

### Boil until boiling and not a minute longer

Once water or other liquids reach boiling, they won’t get any hotter. Turn the burner down or off when it starts to boil. **ET**

*Provided by SDG&E, reprinted with permission. For more information, visit [sdge.com/saveenergy](http://sdge.com/saveenergy) for energy saving tips, updates and information on energy-efficient rebates and services.*



*Gas ranges or ovens cost less to operate than electric, and generally heat faster.*

## EarthFair 2012 in Balboa Park on April 22

A QUICK GUIDE TO WHAT TO SEE AND DO AT THIS LANDMARK EVENT.

by Chris Klein

**E**arthFair 2012 is San Diego EarthWorks' 23rd annual event. EarthFair in Balboa Park has become the largest free annual environmental fair and Earth Day celebration in the world!

Produced by 400 volunteers, EarthFair 2012 will feature more than 350 exhibitors, theme areas, a food pavilion, a special Kids' Activity Area, four entertainment venues, the Children's Earth Parade, and the Alternative Fuel Vehicle Show.

Earth Day is a "big tent" celebration, encompassing everyone and everything that concerns the care and preservation of our environment. EarthFair mirrors this broad view.

### Exhibitors

The exhibitors are the heart of EarthFair. They represent every type of environmental organization, governmental program and commercial enterprise with goods, services, and causes that address our environment and quality of life. EarthFair exhibitor fees are graduated to allow everyone to participate, from the smallest club to the largest corporation.

It's impossible to list everything you'll

find at EarthFair: traditional conservation organizations; wildlife preservation groups; green building; products made from natural and organically grown crops; organic gardening information; alternative energy vehicles; eco-tourism opportunities; many alternative and traditional health care products and services; pet adoption services; clean air and clean water products; habitat preservation groups... the list goes on and on.

If your organization, club, or company is interested in exhibiting at EarthFair, please visit [www.EarthDayWeb.org](http://www.EarthDayWeb.org).

### Special for Kids

In our Children's' Activity Area you'll find crafts, games, face painting, story-telling, and a hands-on activities for children of all ages. Activities are designed to educate, entertain, and inspire youth in the spirit of Earth Day. This year, participants can take part in a number of eco-friendly projects and crafts. Our Children's Stage features performances throughout the day.

This year we are privileged to have the Big Mama Earth organization join us to co-

host the Children's Area (see the story about Big Mama Earth on page 20). They will be providing our state, and their Eco-Earth Kids will perform throughout the day.

### Children's Earth Parade

The Children's Earth Parade begins at 10:30AM. From the Spanish Village, it marches through the Park to the Children's Area in the Pan American Plaza (close to the Auto Museum). Participants are invited to dress up as endangered species or present their favorite earth-friendly messages. To find out more about the Parade, to see photos of previous parades, or to register, please visit [www.EarthParade.org](http://www.EarthParade.org).

### eARTh Gallery

The eARTh Gallery features crafts and artwork made from recycled, discarded or waste materials; or depicting "Endangered Spaces" in San Diego County. The artwork will be presented next to the Children's Area in the Pan American Plaza (close to the

(Continued on page 14)



## Attend Awards Reception in honor of Earth Day

**S**an Diego EarthWorks presents the 22nd annual V.I.P. Reception (Very Important Planet) and E.A.R.T.H. Awards:

**Wednesday, May 16th, 6:00PM-9:00PM**  
**9601 Ridgehaven Court, Kearny Mesa**

Business and community members will gather at the V.I.P. Reception to celebrate Earth Day, acknowledge individuals and organizations who have taken extraordinary action on behalf of our environment, and support San Diego EarthWorks programs. The evenings activities will include:

- A **Silent Auction** with eco-friendly goods, services and entertainment packages.
- A **buffet dinner** and no-host bar.

- **San Diego EarthWorks' "EARTH" Awards**, presented by Councilmember Todd Gloria.

V.I.P. Reception sponsors include: San Diego County Air Pollution Control District, Solar Turbines, San Diego Gas & Electric, and Sullivan International Group, Inc., and Black Mountain Ranch, LLC. Volunteer online at [www.earthdayweb.org](http://www.earthdayweb.org). **ET**

For more information, to donate to the silent auction, to volunteer, or to purchase tickets, visit [VIPReception.org](http://VIPReception.org), email [vip12@earthdayweb.org](mailto:vip12@earthdayweb.org), or call (858) 272-7370.

## On-line EarthFair Exhibitor Finder

We list the names of our exhibitors on our website, with links to their websites. However, searching through hundreds of exhibitors is daunting.

To help you find specific exhibitors, we are providing a special web-based service.

Starting April 6, go to [EFExh.org](http://EFExh.org). You will find a list of 60 topics, like "Climate Change", "Peace", "Solar-electric" and "Waste Reduction." Check off the topics you are interested in, press the "Show Exhibitors" button, and the system will list: the exhibitors that address those topics, their exhibit description, and a link to their website. One week before EarthFair we will also list their exhibit location.

# Award inspiration

NOMINATE A DESERVING INDIVIDUAL OR GROUP FOR AN E.A.R.T.H. AWARD

by Alice Martinez

Often, the people making extraordinary efforts on behalf of the environment and our quality of life are unappreciated beyond their small circle of associates. EarthWorks' **E.A.R.T.H. Awards** (Environmental Action & Restoration That Helps) honors these special individuals and groups, gives them the wider acknowledgment they deserve, and encourage others to follow their example.

You may know individuals or groups worthy of an E.A.R.T.H. Award. For example, it

could be a student that has set up a recycling program at school, a restaurant that has converted to recycled paper products, a government department that has eliminated pesticide use, or an organization that is promoting zero-waste. The possibilities are endless.

EarthWorks asks YOU to nominate potential recipients for the **E.A.R.T.H. Awards**. **The nomination deadline is April 22, 2012 – Earth Day!** Self-nominations are welcome.

A nomination form can be filled out at the EarthWorks on-line registration system:

- Go to [sdew.earthmedia.bz/login](http://sdew.earthmedia.bz/login)
- Register yourself on the system as a New associate
- Click the **E.A.R.T.H. Award 2012 Nomination** button and fill out the form.

If you don't have web access, please call the EarthWorks office at 858-272-7370. The awards will be presented to the winners by San Diego City Councilmember Todd Gloria on Wednesday, May 16 at the 22nd annual V.I.P. Reception (see story on page 13). **ET**

## EarthFair 2012

(cont. from page 13)

Houses of International Relations).

For information about displaying or selling your eco-art or -crafts, please visit [www.SDEarthGallery.org](http://www.SDEarthGallery.org).

### Green Building

Exhibits in the Pan American Plaza showcase products and technologies that can make

your home more environmentally sustainable and healthy. Find out about energy- and resource-saving products and materials, such as energy-efficient appliances and low-E windows. A wide variety of solar-electric systems can help you get "off the grid."

### Cleaner Car Concourse

The Cleaner Car Concourse features alternative-fuel and high-efficiency vehicles of all descriptions (hybrids included). This isn't just "someday" – these are vehicles

being used on the road today. The vehicles will be on display in the Pan American Plaza.

Do you have a vehicle that belongs in the show? Visit [www.EarthDayWeb.org](http://www.EarthDayWeb.org) for more information and to register.

### First, you have to get there

EarthFair attracts around 60,000 visitors. That's a lot. If you plan on arriving at EarthFair after 11:00AM, there will be little or no car parking close to the park. Instead of sitting in your car looking for that one needle-in-a-haystack parking place, try one of these alternatives: **bike; use transit; or use off-site parking with a free shuttle ride.**

#### Ride a bike

The San Diego County Bicycle Coalition will offer free, guarded bike parking in two locations (see map on pages 16-17):

- **On Village Place** (off of Park Blvd., south of the Zoo) behind the Natural History Museum.
- **In the Alcazar Garden parking lot** (from the Laurel St. bridge, turn right into the Alcazar Garden just past the Museum of Man).

If you don't want to ride the entire way to the park, drive part way, park in a convenient spot, and ride the rest of the way.

#### Ride public transportation

There is a trolley stop about a ten-minute walk from the Park. See the details in the **Try Transit for Earth Day** on the left.

#### Trolley and Free Shuttle

Take the free shuttle service from City College. From the trolley stop on Park Blvd., cross to the east side of Park Blvd. and walk up to Russ Blvd. The shuttle stop is close to

(Continued on page 22)



**Social Media**



Social media is a great way to connect to San Diego EarthWorks and the EarthFair. We will be using Facebook pages and Twitter profiles to post updates, share news, and promote EarthFair events, exhibitors, and supporters.

We invite you to "like" **San Diego Earth Day** ([Facebook.com/SanDiegoEarthDay](http://Facebook.com/SanDiegoEarthDay)) and follow us on Twitter ([@SDEarthDay](https://twitter.com/SDEarthDay)) to share your EarthFair experiences, expectations, and tips. Post your favorite EarthFair photos and share your favorite exhibits.

You can also find out about performances and special events. Have an question about EarthFair? Ask our visitor support staff that will be monitoring our Facebook and Twitter accounts throughout the day.

And be sure to use the hashtag **#SDED2012** on your environment- and fair-related Tweets!

## Try Transit for Earth Day!

Take any Blue or Orange Trolley Line to the City College Station in downtown San Diego. The station is located between 11th Ave. and Park Blvd., and C St. and Broadway. The Route 7 bus stop is just steps away at the corner of 11th Avenue and C Street. Remember to get a Day Pass when you start your trip on the trolley.

Use the Transit Trip Planner on-line at [transit.511sd.com](http://transit.511sd.com). For automated schedule info, call: 619-685-4900.

Remember, riding MTS buses and trolleys make every day "EARTH DAY." When you use transit instead of driving a car you reduce greenhouse gases, slow global warming, and improve our air quality. Saving just one gallon of gas can eliminate 19 pounds of carbon dioxide emissions.

SAN DIEGO EARTHWORKS PRESENTS  
**EARTHFAIR 2012**  
 BALBOA PARK • SAN DIEGO • APRIL 22, 2012

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 vibrant city

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**IT'S OUR NATURE**



## EarthFair Sponsors

San Diego EarthWorks Acknowledges and thanks our sponsors and supporters without whose generous support the EarthFair would not be possible:

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 Qualcomm  
 Solar Turbines  
 University of San Diego  
 CAR2GO  
 Big Mama Earth  
 EDCO Disposal  
 San Diego Bicycle Coalition  
 Urban Corps of San Diego  
 Zero Waste San Diego  
 10News  
 San Diego 6 The CW  
 Sophie 103.7 KyXy 96.5  
 Magic 92.5 Z90.3 91X  
 Channel 933  
 Radio Latina 104.5 FM  
 102.1 KPRI  
 105.7 The Walrus

## Children's Sky Stage Children's Area

Produced by Betsy Hawkins and Big Mama Earth Entertainment

Music, Dance, Magic, Puppet Show and Storytelling throughout the day

## San Diego Folk Star Stage UN Building Lawn

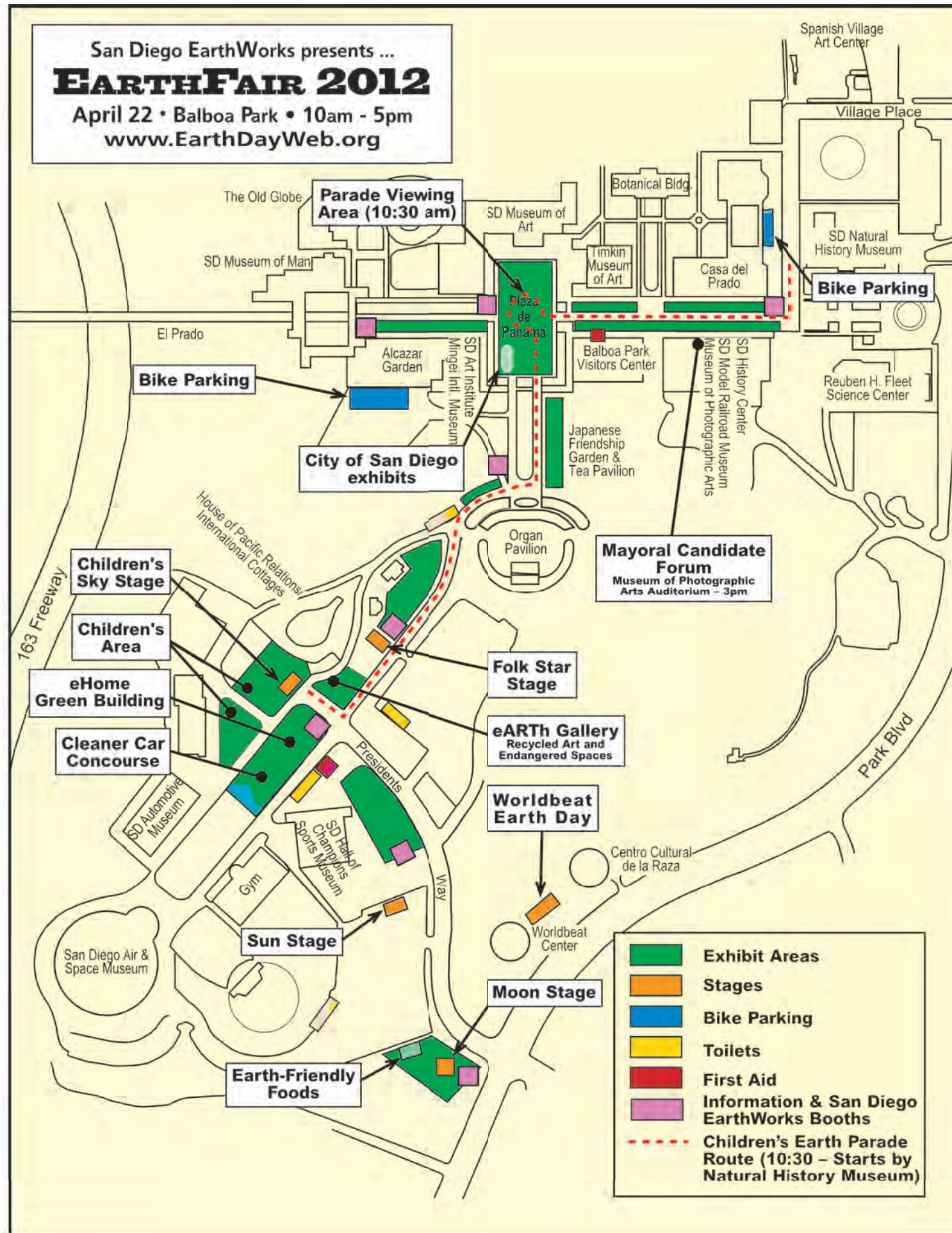
Presented by San Diego Folk Heritage Society

Traditional and new folk, blues and jazz throughout the day

## Multi-Cultural Earth Day World Beat Cultural Center

Music - Exhibitors - Food

San Diego EarthWorks presents ...  
**EARTHFAIR 2012**  
 April 22 • Balboa Park • 10am - 5pm  
[www.EarthDayWeb.org](http://www.EarthDayWeb.org)



## Zero Waste at EarthFair

EarthFair has a goal of **Zero Waste**, meaning everything that is thrown away will either be recycled or reused. Last year, almost 90% of our waste was diverted from the landfill.

If you have food, paper or other waste, don't just put it in a trash can; instead, go to one of the **30 Zero Waste Stations** throughout EarthFair and recycle! Each station, under a colored canopy, will have blue Recycling and green Composting bins, and our volunteer **Trash Talkers** who can answer any recycling or composting questions you have, and help you get your waste in the right bin.

## Canobliss Sun Stage

### Federal Building lawn

Produced by Canobliss and Mike Russo

10:00 Mark Miller - Acoustic guitar  
 11:00 Josh Damigo - Acoustic guitar  
 12:00 The Fooks - Celtic punk rock  
 1:00 The Chimpz - Rock  
 2:00 Psychothermia - Rock  
 3:00 Psydecar - Reggae

## Moon Stage

### Park & Presidents Way

Produced by Spirit Soul & Friends

12:00 Edward and Veronica Palma - Hawaiian ukelele duet, Hula dance  
 12:25 Jam & Bread - Acoustic guitar, Folk, World  
 1:05 Elijah Bustos - Acoustic guitar, Reggae, Rock  
 1:45 Spirit Soul & Friends - Adult Contemporary, R&B, World Fusion  
 2:25 Will & Ted - Acoustic guitar, Reggae, Blues, Jazz, Spoken word  
 3:05 Quad IX - Progressive Rock



## Social Media at EarthFair



"Like" San Diego Earth Day on Facebook  
 Follow @SDEarthDay on Twitter  
 and Tweet with #EarthFair

- Share your favorite exhibits, activities, events
- Post your favorite EarthFair photos!
- Find out about performance schedules, special events
- Ask questions of our event staff on-line

# EARTHFAIR EXHIBITORS

AS OF 3/17/12

- 102.1 KPRI  
105.7 The Walrus  
10News  
91X - Z90.3 - Magic 92.5  
A New PATH  
Advanced Exteriors, Inc.  
Alternative Healing  
Network / Adams Ave.  
Integrative Health  
Animal Protection &  
Rescue League  
Associated Students  
SDSU  
Awareness Magazine  
B 'N' B Kettle Corn  
Back Country Land Trust  
Baha'i Faith  
Big MaMa Earth  
Entertainment  
Birch Aquarium at  
Scripps  
Bonita Vista High School  
Bonita Vista Red Cross  
Club  
BottleHood  
Brazen arts  
Buddha's Light  
International  
Association  
Buddhist Tzu Chi  
Foundation  
CA Center for  
Sustainable Energy  
CaboandCoral.com LLC  
Cabrillo National  
Monument  
California Native Plant  
Society-San Diego  
Chapter  
California Wolf Center  
Californians for  
Population  
Stabilization  
Camp Stevens  
Campaign to End  
Genocide in  
Uganda...Now!  
Can Crafts by John  
Cangles, LLC  
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Carol Murphy  
CBS Radio San Diego -  
KSCF & KyXy  
Center for Electrosmog  
Prevention  
Cheetah Conservation  
Fund, San Diego  
Chapter  
Chris Witnik  
Christian Vegetarian  
Association  
Christians for EarthCare  
Christine T. Babcock  
City of San Diego -  
Environmental Services  
Dept.  
City of San Diego Solid  
Waste Local  
Enforcement Agency  
City of San Diego Water  
Conservation  
Clayponics  
ClearDome Solar  
Thermal/Tower  
Garden  
Clif Bar & Co  
Committee Opposed to  
Militarism and the  
Draft  
Councilmember Todd  
Gloria  
County of San Diego  
Department of Parks  
and Recreation  
County of San Diego,  
Vector Control  
Program  
Culligan Water of San  
Diego  
Cuyamaca Rancho State  
Park Interpretive  
Association  
dc woodcrafts  
Donate-a-Pack  
Foundation  
Dunn Edwards Paints  
Envirogentle  
Express  
Vegetarian/Ready  
Veggie  
Fair Trade San Diego  
Fair World Project  
Fiesta Island Dog  
Owners  
First Unitarian  
Universalist Church of  
San Diego  
Fleet Readiness Center  
Southwest  
Food For Life San Diego  
Fred Ferino and His  
Inventions  
Friends of Humane  
Society de Tijuana  
Gloria Johnson  
Goodwill Industries of  
San Diego County  
Green Menu  
Green Party of San  
Diego County  
Green To Go  
Growing Chiropractic  
GTG Beverages  
Gudi's Aromatherapy  
HankyBook  
Heifer International  
High Tech High School  
Humanist Fellowship of  
San Diego  
I Love a Clean San Diego  
IBEW Local 569  
Innovative Growing  
Solutions  
Inspirational Imports  
Irish Charm  
ISKCON  
Jamar Power Systems  
Jodi Rosano Designs  
June Accessories  
Just Like My Child  
Foundation  
Kaiser Permanente  
Kate Jarosinska  
Kehaulani Gourds  
Kids for Peace  
KidsEcoClub  
Knitting by Marilee  
KYXY 96.5 FM & Sophie  
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Seals  
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Manila BBQ & Grill  
Laguna Mountain  
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Last Chance for Animals  
League of Women Voters  
of San Diego  
Ledesmas Foods  
Lemon Heaven  
Lions Tigers & Bears  
Love, Create & Help  
Lume di Luna Designs  
Mache MacheTe  
MAYESA  
Metropolitan Transit  
System  
Mignon Vietnamese  
Restaurant  
Mission Trails Regional  
Park Foundation  
Montroses UP-RE  
BOUTIK  
Move San Diego  
My Plumber  
MYTHOLOGY by Richard  
Fredrick  
Nataraja Meditation and  
Yoga Center  
Natural Body & Bath  
Naval Facilities  
Engineering  
Command Southwest  
Nika Water  
Nissan North America,  
Inc.  
OB Green Gold  
Office of Assemblyman  
Nathan Fletcher  
Olivewood Gardens  
Om! Lifestyle  
One of a Kind Purses  
Organic Art  
oxo Pottery  
Pacific Coast Naturals  
Palomar Mountain Water  
Peace Pies  
Photography by Nicole  
Planned Parenthood of  
the Pacific Southwest  
Plant With Purpose  
Plaza de Panama  
Committee  
Pour It Forward  
Premier Event Catering  
Inc.  
Project Wildlife  
Rainbow Waters  
RainThanks & Greywater  
Re-Pac Bags  
Re-Wear Clothing &  
More  
Real Goods Solar  
REC Solar  
Records and Stuff  
Regeneration-Art  
Renewal by Andersen  
San Diego 6 The CW  
San Diego Association of  
Governments  
San Diego Audubon  
Society  
San Diego Beekeeping  
Society  
San Diego County Office  
of Education  
San Diego Democrats for  
Equality  
San Diego Drums &  
Totes  
San Diego Epiphyllum  
Society  
San Diego Gas & Electric  
San Diego House Rabbit  
Society  
San Diego Humane  
Society & SPCA  
San Diego Neck and  
Back Pain Relief Center  
San Diego Peace Corps  
Association  
San Diego Public Library  
San Diego Roots  
Sustainable Food  
Project  
San Diego Spine &  
Rehab  
San Diego Toyota  
Dealers  
San Diego Veterans For  
Peace  
San Diego Zoo Global  
SanDiego350.org  
Save Everyone's Access  
(SEA)  
SEA SHEPHERD  
SeaWorld of San Diego  
Self-Heal School of  
Herbal Studies and  
Healing  
SHARE Network San  
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Smart Home  
Remodeling, Inc.  
Smooth Legs Hair  
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Middle East)  
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The 1:1 Movement  
The American Chemical  
Society, San Diego  
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The Camping Bares  
The Center For Natural  
Dentistry  
The Friendly Feather  
Shop  
The Inca Shoe  
Thirsteas & Bella Crepe  
Thresholds Home  
Funerals  
Tools 4 Healers  
Trashy Crafter  
TUWA Elements of the  
Earth  
Twinleafz  
U.S. Green Building  
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Chapter  
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upCYCLED Works  
Urban Octopus  
Viva Pops  
Voice of San Diego  
Water Conservation  
Garden  
WateReuse Association  
- San Diego Chapter  
Where's my Bag  
Whole Being Weekend  
Women Occupy San  
Diego  
XLTN 104.5FM Radio  
Latina  
YaYa Bamboo

EarthFair 2012 is funded in part by a grant from the City of San Diego Commission for Arts and Culture

# Save Earth Day in Balboa Park!

Last year, the Balboa Park administration informed San Diego EarthWorks that they would not issue a permit for EarthFair 2012, as they had in prior years.

After 22 years of successful events – hosting more than half a million visitors and leaving Balboa Park cleaner than we found it – this came as a shock.

We put out a call to our exhibitors and volunteers. On short notice, about 30 folks came down to City Hall to express their support. It made a difference – we received our permit for 2012.

**But it's unclear how things might go in 2013 and beyond.**

## YOU CAN MAKE A DIFFERENCE

- **Sign up to support future Earth Days** at any EarthWorks booth at EarthFair.
- **Not attending this year? Email us at [SaveEarthFair@SDEarthDay.org](mailto:SaveEarthFair@SDEarthDay.org),**
- **“like” San Diego Earth Day on Facebook, and follow @SDEarthDay on Twitter.**

Note: San Diego EarthWorks will never share your email or other personal information with any other organization without your explicit permission, period.

## Also in Balboa Park...

WHILE MOST OF OUR ATTENTION ON SUNDAY, APRIL 22, WILL BE ON EARTHFair, HERE ARE A FEW ITEMS OF NOTE BY INSTITUTIONS THAT CALL BALBOA PARK THEIR HOME.

### The Reuben H. Fleet Science Center

Enjoy 100+ hands-on exhibits, IMAX films and digital planetarium shows at the discounted rate of **2 for the price of 1** on Sunday, April 22, 2012. Rest your tired feet as you enjoy the new 45-minute IMAX film that follows a mother polar bear and her two seven-month old cubs as they navigate the changing Arctic wilderness they call home in **To The Arctic**.

The Science Center exhibit galleries feature **So Watt**, a close look at various energy sources, **Geometry Playground**, a full-mind and full-body geometry experience, and the opportunity to travel inside a human cell in **Cellular Journey**. Two for the price of one admission offer is valid at the ticket counter from 10am to 6pm on April 22, 2012 in celebration of EarthFair.

### Japanese Friendship Garden

The Tea Pavilion at the Japanese Friendship Garden serves traditional Japanese green tea, herbal and specialty teas, as well as sushi, noodles, rice bowls, salads and snacks. Open during EarthFair from 10:30am - 4pm

### San Diego Natural History Museum

“The Best of Nature Photography

Show,” an international juried competition, will be on view in The Ordovery Gallery at the San Diego Natural History Museum. Visitors to the Museum will view magnificent nature-based imagery by amateur and professional photographers. The 70 selected photographs will include sublime landscapes, whimsical and dramatic wildlife images, and unusual close-ups of nature’s beauty. Open 10am - 5pm on 4/22.

### Museum of Photographic Arts

Unusual Suspects: Paintings and

### Photographs by Holly Roberts

4 Feb, 2012 - 6 May, 2012

“Unusual Suspects” invites viewers to explore new approaches and expression in photography through the innovative work of Holly Roberts. By combining painting and collage in her finished pieces Roberts lets her imagination guide her as she takes original photographs and repurposes them to create illustrative stories with figures and animals, infusing the work with a rich narrative.

(Continued on page 20)

## Mayoral Candidates Forum

at EarthFair in Balboa Park

3PM – April 22 – Earth Day

Museum of Photographic Arts Auditorium  
(on El Prado East)

Hear from candidates for Mayor of City of San Diego  
on Earth Day and submit your questions

Hosted by San Diego League of Conservation Voters &  
San Diego EarthWorks

# Keeping the “Earth Day Spirit” alive

CAN WE SAVE THE PLANET FOR A BUCK A PERSON? PUBLIC SUPPORT IS ENCOURAGED FOR A NEW ECO-KIDS TV SHOW.

Is the Earth Day spirit still alive? In today’s economy, will families donate \$1 or more to save the Planet? Mike Miller, cofounder of Big MaMa Earth Entertainment, is counting on it.

Miller, known as Grandpa Mikey to his grand kids, is a TV infomercial producer, a past business consultant, and has been a devoted environmentalist his entire life.

Mike observes, “Our environment is in peril – approaching a tipping point. Our children, being the future of our planet, can show us the way.”

To encourage everyone to take action, Miller and his team are developing the first Eco-Kids TV Show called, “Big MaMa Earth & ME.”

The TV show will engage, inspire, and empower children, teachers, and families to take action. It will teach them about environmental solutions they can implement in their homes, schools, and communities. The TV show will be a blend of a “green” Hannah Montana, Wild Kingdom, and Sesame Street.

The Big MaMa Earth Learning Experience, which is the hub of the TV show, has been portrayed by many as being an “Eco-Disney Act on Wheels.” Miller designed a cartoon-like solar powered trailer with a drop-down stage and a professional sound system... pulled by a new Ford Eco-boost truck.

To showcase the Learning Experience, Miller and one of his team members, the

vocal artist Ross, auditioned children from local schools and theatre groups who were environmentally conscious – and formed the Eco-Earth Kids. Original Eco-theme songs such as: *Big MaMa Earth & ME*, *Big MaMa Earth is Crying Out*, *Go Green & Clean*, *Save the World*, *Change*, and others are performed by Ross and the Eco-Earth Kids on the Big



MaMa Earth stage.

Big MaMa Earth Entertainment has 36 animated characters in the development stage, of which Big MaMa Earth is the main character. Her friends – RainForest Tree-O, Sammy Sea, and Pukey Pollution – were released to support and interact with Big MaMa Earth at events and in the Eco-TV series. As the Eco-TV series grows in popularity, other animated characters will be released and additional walk-around theme characters will be produced to keep the Eco-TV series fresh, unique, and exciting.

The Big MaMa Earth Learning Experience cohosted 17 high-profile events in 2011. For 2012, they will be cohosting the Dana Point Whale Festival on March 3rd & 4th and cohosting the children’s area at Earth Day at Balboa Park in San Diego on April 22. Miller enthusiastically invites the public to visit them at these important events.

Miller believes the public will choose to support the creation of this TV show and has contracted with Kickstarter (an established social media funding platform that helps artists, companies, and entrepreneurs) to facilitate online pledges. To pledge \$1 or more, go to the Kickstarter website ([www.kickstarter.com](http://www.kickstarter.com)).

provided by Big MaMa Earth Entertainment ([kickstarter.com](http://kickstarter.com)). Type “Big MaMa Earth” into the discover bar. The project will appear. Please watch the video and read the information. On the top right side, you will see a button: “Donate \$1 or more.” Click on it to begin a simple registration for Kickstarter and Amazon. You’ve just helped save our Planet.

“Why should I care or pledge to create this Eco-Kids TV Show?” asks Miller. “Since the beginning of the Industrial Revolution, humankind has over-consumed many of the earth’s natural resources to a point of exhaustion – with little regard for the long term effects on our planet and its inhabitants. We must be good stewards of our planet and STOP this destructive cycle. Our children are our future and they will learn through this TV Show. Please do not think of it as a donation! Think of it as an Environmental Protection Plan for future generations. If you see the value in this TV Show, pledge – and be a part of history!”

According to Miller, a large portion of the proceeds, which the show will generate through advertising, will be donated to the Big MaMa Earth Foundation to enhance environmental education in schools.

Big MaMa Earth is dedicated to empowering children and families everywhere to take action through the dissemination of factual and non-biased scientific information that is both enlightening and entertaining. This initiative will bring about positive, incremental changes and will ultimately fuel humankind’s reconnection to Mother Earth.

Miller encourages kids, families, and corporations to review the website at [www.bigmamaeearth.org](http://www.bigmamaeearth.org). The “Events,” “Photo,” and “TV/Press” sections show how Big MaMa Earth and the Eco-Earth Kids are loved by children, families, and teachers – and how they inspire and empower others.

**ET**

For more information about the Big MaMa Earth project, contact Mike Miller at 951-244-8444, or e-mail Mike at [bigmamaeearth@ca.rr.com](mailto:bigmamaeearth@ca.rr.com).

## In Balboa Park

(cont. from page 19)

### Eyes of a Nation: A Century of American Photography

11 Feb, 2012 - 13 May, 2012

Eyes of a Nation, drawn from MOPA’s permanent collection, is a look at the rich history of American photography by artists working in the 1870s-1970s. Eyes of a Nation explores the ground-breaking movements and photographers who helped shape photography at an important time in the development of our country. **ET**



# KidsEcoClub

*where kids and the environment come to meet*

Raising the eco-consciousness of K-12 students and educators through classroom and after school environmental clubs.

[www.KidsEcoClub.org](http://www.KidsEcoClub.org)

## COLLABORATIONS



# POLLUTION AND WASTE

## The problem with plastic bags...

by Evan Lewis

**P**lastic bags. Oh, they are such a helpful resource in our society, but are they really worth it? Are they really worth killing animals, overflowing our landfills, and polluting our environment?

Every man, woman, and child on our planet uses more than 100 bags a year. That may not seem like a lot, but worldwide we use

more than 3 trillion plastic bags every year. 3,000,000,000,000. That is 12 zeros. And only 1% are recycled!

There are many reasons that plastic bags shouldn't be used. Have you ever thought how much they can damage our environment? More than you may realize. Many people go through their daily lives, not knowing or noticing their impact on the environment.

Once again: we use more than 3,000,000,000,000 of them each year. They kill more than 100,000 marine animals each year, mainly the sea turtle. But they kill more than marine animals: they kill land animals too. Thousands of birds swallow them and die. They take over 400 years to biodegrade! That means your children's, children's, children will still have the burden of the same plastic bag you used today.

Did you know, that the plastic bag was first used in 1957? If you do the math, not one plastic bag has ever completely biodegraded. Have you heard of all of the chemicals in plastic bags? As the bags start to break down, the

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*Every man, woman, and child on our planet uses more than 100 bags a year... more than 3 trillion plastic bags every year worldwide. ... And only 1% are recycled!*

---

chemicals enter the soil and our drinking water, which can be very harmful to all animals, including humans.

Have you heard of the Great Pacific Garbage Patch that is floating across the North Pacific Ocean? This Patch is larger than the size of Texas. This patch was not even there until plastic was invented. The patch is mainly made of plastic debris and trash that has washed out into the ocean. This plastic can be very harmful if a marine animal or a bird swallows it, or becomes entangled in it and drowns. Also, the plastic breaks down and releases toxins into the water, killing animals. More than 267 marine species are killed just from plastic debris in the ocean!

What can we do to help? One way is to bring your own reusable and recyclable bag to stores and use it for as long as possible. They can be used at the grocery store, at picnics or lunches, or just to carry things. Also if you forget your reusable bag at a store, try and get



*Follow Evan's lead and use recyclable, reusable bags in place of single-use disposable plastic bags.*

paper as a alternative to plastic bags. Also, try to reduce, reuse, and recycle as much as possible. Keep in mind that anything that may have a small or large impact on the environment is still an impact. We all have a choice when it comes to the use of plastics, we just have to make the right one. **ET**

*Evan Lewis, age 11, is the National Green Youth Council Member, KidsEcoClub. Evan's information sources for this article include: Endangered Species International, Environmental Protection Agency, Greenpeace, New York Times, and World Watch Institute.*

## EarthFair 2012

(cont. from page 14)

the corner of Russ Blvd. and Park Blvd.

### Off-site Parking and Free Shuttles

**Free shuttle services** will take you between the Fair and **two free off-site parking locations: at City College, and at the County Administration Building on Pacific Highway. The shuttles will run from 10:30 am to 6 pm.** NOTE: EarthFair shuttle buses cannot accommodate bicycles.

To get to the **two City College lots**, from the 163 freeway, exit on Park Blvd. and follow the signs: turn right (south) on Park, then turn left (east) on C St. From C you can

either: (1) turn left (north) on 16th, and go straight ahead to the parking structure across from Garfield High, or (2) go straight ahead, turn right on 17th, and park in the multi-level parking structure.

The shuttle stops are marked with a sign.

To get to the **County Administration north parking lot** (and observe the one-way streets), take Pacific Highway and turn west on West Ash Street, turn right on North Harbor Drive, and right again on West Grape Street. Enter the north parking lot by turning right off of Grape. Note that parking in the north lot is free; if the north lot is full, parking is available in the south lot for a fee.

## And... VOLUNTEER!

It takes about 400 volunteers to produce this event. Come make a difference, and help create a fun, safe, productive event for 60,000 of our closest friends. There are 17 different volunteer jobs. Some are active and physical, others mental and social, still others almost contemplative. Work one 3-hour shift, or pitch in all day. Your choice. Check it out: [www.EarthDayWeb.org/EF/EF\\_Vol.html](http://www.EarthDayWeb.org/EF/EF_Vol.html). **ET**

# Climate, carbon, and political will

COLLECT A CARBON TAX AT THE SOURCE, AND DISTRIBUTE THE PROCEEDS TO US HOUSEHOLDS.

SOUNDS SIMPLE... BUT IT MAY BE JUST THE THING TO SHIFT ENERGY USE WITH BIPARTISAN SUPPORT.

by John H. Reaves

**E**nvironmentalists often see plenty of things going wrong in our country but are unsure of how to correct them. That is especially true about climate change.

But there is an elegant, overarching solution that can help transform our energy base and our economy. There is greater possibility of bipartisan support for this plan than any previously proposed because it does not involve government spending, picking favorites, or a complex regulatory scheme. It is a market-based solution that applies equally to all.

The plan involves a revenue-neutral carbon fee, with 100% recycled to all households as a dividend. It requires no government investment and can transform our economy in a

fundamental way. For job creation, this free-market mechanism cannot be beat. It unleashes investment in clean energy and conservation – creating millions of jobs – while protecting the poor. And switching to clean energy will produce indirect benefits worth trillions.

## The details

A steadily increasing carbon fee of \$15 per ton per year would be charged by the IRS at the source – the wellhead (e.g., oil), mine (e.g., coal), and port of entry – and held in a trust fund. The fee trickles down, affecting choices consumers make. The predictable price signal to the market, which businesses like, creates vast opportunities for those who make cleaner products and conserve fossil fuels. Everyone shares the burden and opportunity. Private equity will flood the new market without government direction, spending, or guarantees.

This plan keeps our businesses competitive with other countries. If another country lacks the same carbon fee, a tariff is charged for the difference on the import. Such action would encourage other countries to capture the fee themselves and create a “reverse domino” affect. Our exporting businesses would likewise be paid any difference in fees.

## The dividend

The plan is also popular because all the money is returned equally to all households as a dividend (one share for each adult (up to two) and one-half share for children (up to two) per household), and 60-70% of the households would receive dividends that exceed or equal the fees. There have been variations on the theme, such as a Republican proposed reduction of payroll taxes, but payments to a broader range of affected people would be fairer. Payments could be made by monthly check, debit card, payroll tax offset, or credit to tax returns.

Our military urges us to move quickly to clean energy for national security purposes. Trillions have been spent to preserve access to foreign oil. Political instability is feared from expected devastating effects of climate change on low-lying and food-growing areas worldwide.

## The costs: true and hidden

We aren't currently charged for the negative impacts of fossil fuels, but we surely pay in so many ways. If we paid the true cost of fossil fuels – and covered the cost of health impacts caused by air pollution, climate change adaptation and mitigation, cleanup of oil spills and contaminated waters, the cost of our military to maintain access to oil and our support of often unfriendly governments for such access, etc. – then we could not afford fossil fuels.

The fee and dividend plan levels the playing field for renewables with fossil fuels within ten years. It protects us against volatile oil prices when there is strife in the Mideast and as we venture past world peak oil production. It creates jobs without deepening an investment in riskier oil and gas endeavors – including the destructive tar sand extraction process, which grinds forests into country-size wastelands to produce the dirtiest polluting fuel. The environment need not be sacrificed for energy or jobs.

## Political angles

Any climate plan that will last must find bipartisan support. There is growing bipartisan support for fee and dividend because it stimulates homegrown clean energy, it does not create fiscal drag, money stays out of government coffers, and government does not pick winners. That is what appeals to conservatives such as George Shultz, President Reagan's Secretary of State. The marketplace selects winners. And research shows a dollar invested in clean tech grows two to four times as many jobs as oil and gas.

The benefits of moving away from fossil fuels at this time are almost immeasurable. The cost of continuing our addiction to oil is staggering. The winner of the clean energy revolution will enjoy world prominence and power. Fee and dividend gives people real reason for hope.

Representative Pete Stark (D-CA) from Fremont has introduced a bill that closely follows fee and dividend (except the initial annual carbon fee is used to reduce the deficit each year). His bill, H.R. 3242, Save Our

(Continued on page 24)

## JOIN CITIZENS CLIMATE LOBBY

As we know, members of Congress are generally a fearful crowd when it comes to change. They need to feel the people are behind them. When large groups of diverse people rally, it is amazing how many “leaders” emerge.

For those who would like to get more active in creating the political will for our politicians to enact climate/clean energy legislation, there is no better group than Citizens Climate Lobby. CCL, which started in San Diego in 2007, is a nonpartisan, non-profit group of grassroots groups all over the U.S. and Canada. Together, the groups lobby their members of Congress, write Opinions and Letters to the Editor in newspapers, hold educational and outreach meetings, communicate with newspaper editors and politicians, and build coalitions. Understanding our politicians need to be pushed before they will lead, Dr. James Hansen, our country's foremost climatologist, calls CCL the most effective climate group today. Get involved and learn what you can do at [www.citizensclimatelobby.org](http://www.citizensclimatelobby.org).

# mayésa

## THE WORLD'S FINEST DARK CHOCOLATE DRINK

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mayesa.com

## Political will

(cont. from page 23)

Climate Act, is worthy of support. Please contact your members Congress to urge passage. Even though it will take time a work, we can do it! **ET**

*John H. Reaves is a San Diego-based business and environmental attorney and cofounder of EcoVolve Partners, an environmental strategies and communications firm. He also cofounded the Land Use and Environmental Mediation Group, a division of National Conflict Resolution Center. He is also the Policy Director for the U.S. Green Chamber of Commerce and was a founding board member with Citizens Climate Lobby.*

## Your nature

(cont. from page 3)

be our nature.

This year is an important election year. Is it your time to get active in politics?

The Sierra Club Political Committee evaluates candidates for their environmental views. Watch for their endorsements, or join in the process. The environment is completely under-represented in all aspects of our life, opposed by a new, unlimited flood of private interest money, much of it from oil and gas interests.

Agitate, negotiate, litigate, educate, demonstrate, recreate: there is much work to be done. There are many, many ways that you can make a difference. Choose a new one for this Earth Day. Make it part of your nature.

**ET**

*Carolyn Chase is editor of the San Diego Earth Times, 2011 chairperson of the San Diego Sierra Club, past member of the City of San Diego Planning Commission, and a founder of San Diego EarthWorks, the host organization of the EarthFair in Balboa Park.*

## EarthFair 2012

(cont. from page 22)

## 10 Protein-Packed Plants

**T**he continuing debate over how much protein the average person needs has done little to change our hunger for it. And who can blame us? Protein is one of the basic building blocks of life.

When most people think about protein, images of cheese, eggs and a leg of lamb pop into their head. Did you know though that every – yes, every – whole food contains protein? From your morning banana to your evening salad, finding plants packed with protein is easy to do. And not only is it easy to do, it's easy for your body to use.

Plant-based foods are free from cholesterol, tend to be high in fiber, and are often alkalizing to the body. All animal products, on the other hand, are devoid of fiber, and are acidifying to the body, which causes calcium to be leached from your bones, as well as decreasing oxygen levels in the blood, and negatively impacting the digestive/lymphatic system.

### The incomplete truth

You may have heard the ongoing debate about “complete” or “incomplete” protein and “food combining,” but be wary; these topics are steeped in misinformation and myth. Here's what I've discovered thus far:

The term “complete protein” refers to foods that have all nine essential amino acids present in the correct proportion for our bodies to build protein with. The term “incomplete protein” refers to foods which have all the essential amino acids, but are simply low in one or more of them. This is called a “limiting amino acid.”

While it's true that most whole plant foods have one or more limiting amino acids,

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<sup>1</sup>More is not necessarily better when it comes to protein. The Recommended Dietary Allowance (RDA) for the average, sedentary adult is only 0.8 grams per kilogram of body weight. Some healthcare professionals argue that this level is too high. No matter whose recommendation you choose to follow, the fact is that each person's protein needs are different, but all can be met with a plant-based diet.

and are thus “incomplete,” this shouldn't send you running for a steak. Our bodies are brilliant. Every food that goes into your system must be broken apart and its nutrients absorbed. During the digestion process, amino acid chains from all sources are broken down and made ready for our bodies to use. If you're eating a good mix of fruits, veggies, grains and legumes, then your body simply collects what it needs from the “amino soup” that your digestion system has absorbed.

There are a growing number of vegan bodybuilders, ultra marathon runners and award-winning athletes out there to prove that meeting your protein needs on a plant-based diet is simple and successful.

Since every whole food has protein in it, you have literally millions of great options to choose from when it comes to creating a balanced diet with the right percentage of protein for your body<sup>1</sup>. I've selected ten nutritious plants to get you started, for both their protein content and other health benefits. You may be surprised at some of the veggies, nuts and grains that made it onto my list: pumpkin seeds, asparagus, cauliflower, peanuts, oats, mung bean sprouts, almonds, spinach, broccoli, and quinoa.



### Pumpkin seeds

If you're like me, pumpkin is one of your favorite fall foods. The last time you steamed up some squash or pumpkin, did you have the seeds? One ounce of pumpkin seeds contains 9.35 grams of protein! That's over two grams more than the same quantity of ground beef. Their high protein content and level of nutrients makes them a wonderful addition to any salad or snack.

#### Health Benefits of Pumpkin Seeds:

**Tryptophan:** Helps fight depression (converted into serotonin and niacin).

*by Alisa Rutherford-Fortunati*  
**Glutamate (needed to create GABA):**

Anti-stress neurochemical, helps relieve anxiety and other related conditions.

**Zinc:** Boosts immune function and fights osteoporosis.

**Phytosterols:** Reduce LDL cholesterol (the bad kind) and up HDL (the good kind); may also be effective in the prevention of cancer.

Pumpkin seeds are also full of manganese, phosphorous, copper, vitamin K, vitamin E, B vitamins such as thiamin, riboflavin, niacin, pantothenic acid, vitamin B-6 (pyridoxine), folates, potassium, calcium, iron, magnesium, zinc and selenium and more!

If pumpkin seeds aren't your thing, don't worry – there are plenty of seed-based protein powerhouses out there.



### Asparagus

Grilled asparagus with a balsamic vinegar drizzle is enough to make my mouth water. Eight spears of this delectable veggie has 3.08 grams of protein, which is pretty potent for such a slender fellow.

#### Health Benefits of Asparagus:

**Vitamin K:** Asparagus is the number one plant-based source for Vitamin K, which is indicated in preventing osteoporosis and osteoarthritis.

**Vitamin A and Folate:** Anti-aging, anti-inflammatory, heart healthy, and indicated in the prevention of birth defects.

**Diuretic:** Reduce water retention.

**Aphrodisiac:** Oh là là!

Asparagus is also a good source of potassium, glutathione, vitamin C, antioxidants (glutamic acid, glycine and cysteine) and more.

(Continued on page 26)

# Protein plants

(cont. from page 25)



## Cauliflower

For years, I wasn't a big fan of cauliflower. I mean, how healthy can an off-white vegetable be? Once I started learning about the health benefits of cauliflower and all its cruciferous plant family members, I gave this veggie its due respect. One cup cooked = 2.28 grams of protein and a truckload of nutrients to reduce your risk for cardiovascular disease and cancer!

### Health Benefits of Cauliflower:

**Carotenoids** (beta-carotene and phytonutrients): Including kaempferol, ferulic acid, cinnamic acid, and caffeic acid.

These nutrients help protect your body against free radical damage.

**Sulforaphane:** Strong indications of a cancer-fighting agent.

**Omega-3 fatty acids:** Reduces inflammation.

Cauliflower is also a good source of vitamin C, manganese, glucosinolates (glucoraphin), vitamins B1 (thiamine), B2 (riboflavin), B3 (niacin), B5 (pantothenic acid), B6 (pyridoxine) and B9 (folic acid), phosphorus and potassium, indole-3-carbinol (strong cancer fighting indications), and more.



## Peanuts

If you grew up in America you've probably had a peanut butter and jelly sandwich or two, but I doubt you knew how healthy this favorite snack really was. One ounce (approximately 28 peanuts dry roasted without salt) = 6.71 grams of protein.

### Health Benefits of Peanuts:

**Co-Enzyme Q10:** Protects the heart during times of low oxygen.

**Resveratrol:** Bioflavonoid believed to improve blood flow in the brain and lower your LDL cholesterol.

**Niacin:** Assists in recovery of cell damage, and protects against Alzheimer's disease and age-related cognitive problems.

Peanuts are also a good source of calcium, iron, riboflavin, niacin, thiamin, pantothenic acid, vitamin B-6, folates, copper, manganese, potassium, calcium, iron, magnesium, zinc, selenium, vitamin E, antioxidants (polyphenols p-coumaric acid) and more.



## Oats

Oats have gotten a bad rap over the years as a breakfast mush fit for little orphan Oliver or old-school prison inmates. But, truly, they are a food for kings. One cooked cup has a whopping 6.08 grams of protein, a great source of fiber, and helpful in stabilizing your blood sugar levels. I enjoy mine in the morning with a bit of banana and cinnamon – yummm.

### Health Benefits of Oatmeal:

**Selenium** (antioxidant combined with vitamin E): Boosts immunity and mood, as well as having indications as a cancer-fighting agent.

**Weight loss:** Keeps blood sugar levels even. The high level of fiber keeps you full longer.

**Magnesium:** Helps with energy production, maintaining strong bones, and possible relief of PMS.

**Phosphorus:** Assists with bone health, boosts energy, and is important for healthy digestion.

Oatmeal is also a good source of tryptophan, Iron, calcium, B vitamins such as thiamin, riboflavin and niacin; vitamin E, zinc, copper, iron, manganese, magnesium and more.

## Mung Bean Sprouts

You may have seen this little bean hiding in your stir-fry (sprouted) or perhaps in a fresh wrap but it hasn't gotten much credit over the years. Most beans are a great source of protein and water soluble fiber. While mung beans



aren't at the top of the bean protein list, they make a good showing. With one cup containing 3.16 grams, it is low in calories and high in protein content.

### Health Benefits of Mung Bean Sprouts:

**Lecithin:** Lowers blood cholesterol levels, reduces liver fat.

**Zinc:** Along with the protein and other vitamins in mung beans, zinc can help strengthen your nails.

**Phytoestrogens:** Contain many anti-aging components for the skin. These phytoestrogens act on estrogen-receptors found in the skin, stimulating the synthesis of hyaluronic acid, collagen and elastin, which are all essential components of the skin's structure.

Mung bean sprouts are also a good source of vitamin A, many B vitamins, vitamin C, vitamin D, vitamin E, vitamin K, folic acid, iron, potassium, calcium, phosphorous, magnesium, zinc and more!



## Almonds

This is a wonderful snack to have around at all times, both for its protein content and nutrient density. Almonds are at the top of the nut chain when it comes to nutrient density, which means they will keep you full longer. With one ounce (approximately 24 nuts) containing 6.03 grams of protein they are a wonderful addition to any snack or meal.

(Continued on page 29)

**SanDiego**



**NEWS**  
**IN THE MORNING**



**MARC BAILEY**

**HEATHER MYERS**

**C.S. KEYS**

**WEEKDAYS 5-9AM**

[SanDiego6.com](http://SanDiego6.com)



**What on Earth are YOU Doing?**  
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**Earth Day 2012**

**EarthFair 2012**  
Sunday, April 22, 2012 ■ Balboa Park  
World's largest annual environmental fair  
and Earth Day Celebration

**Produced by 400+ volunteers**



**Make a difference for the Planet**  
Sign up today:

**[www.EarthDayWeb.org](http://www.EarthDayWeb.org)**  
or call EarthWorks at 858-272-7370

# Protein plants

(cont. from page 26)

## Health Benefits of Almonds:

**Phenylalanine:** Aids in the development of cognitive function.

**Nutrient Rich:** Keeps you full longer which can aid in weight loss.

**Vitamin E/Magnesium:** Important for heart and muscle health.

Almonds are also a good source of calcium, phosphorous, iron, magnesium, zinc, selenium, copper, niacin, manganese, riboflavin, folic acid and more.

## Spinach

We all know spinach is a special green. From Popeye to the posh salads you'll find in fine dining restaurants, spinach has gotten some good press and with due reason. One cup cooked = 5.35 grams of protein. It is also filled with flavonoids (a phytonutrient with anti-



cancer properties). Spinach is good for your skin, your eyes, your brain and your bones!

## Health Benefits of Spinach:

**Neoxanthin and violaxanthin:** Anti-inflammatory epoxyxanthophylls.

**Lutein and zeaxanthin:** Protect the eyes against cataracts and age-related macular degeneration.

**Vitamin K:** Ensures a healthy nervous system and brain function, healthy bones (1000% of the RDA of vitamin K in each full cup of spinach!)

**Vitamin A:** Strengthens immunity and promotes healthy skin.

Spinach is also a good source of vitamin C and other antioxidants, flavonoids, beta-carotene, manganese, zinc and selenium and more.

## Broccoli

Broccoli has many of the same amazing compounds as cauliflower, which is logical as they are both in the cruciferous plant family. As a child I remember enjoying broccoli simply for the fact that the pieces looked like tiny trees. As an adult, I enjoy their impressive nutritional profile AND the fact that they look like tiny trees. One cup of chopped broccoli = 5.7 grams of protein and a heap of child-like enjoyment.



## Health Benefits of Broccoli:

**Glucoraphanin** (which the body processes into sulforaphane): Helps the skin to detoxify and repair itself, along with ridding the body of *H. pylori* which increases the risk of gastric cancer.

**Beta-carotene, zinc and selenium:** All work to strengthen the immune system.

**Indole-3-carbinol:** A powerful antioxidant and anti-carcinogen, which may hinder the growth of breast, cervical and prostate cancer along with boosting liver function.

Broccoli is also a good source of folic acid, vitamin C, calcium (more calcium in fact than most dairy products), lutein and zeaxanthin, B6, folates and more.

## Quinoa

All of the plants on my list that have preceded this one fall short in comparison to quinoa's potential. On its own it is a perfect (Continued on page 30)



## THE energy OF preservation

SDG&E® salutes *San Diego EarthWorks* for inspiring local businesses, organizations and individuals to protect our environment.

We believe that treating the Earth's resources with respect is critical to the health and well-being of our communities – and are proud to support an organization dedicated to a cleaner, greener San Diego.



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# Air pollution thickens the blood

**A**ir pollution, and especially particulate matter, thickens the blood and boosts inflammation, finds experimental research in *Occupational and Environmental Medicine*.

This may help to explain why air pollution is associated with an increased risk of heart attacks, stroke, and worsening respiratory problems.

The research team tested the inflammatory and blood clotting responses of human immune cell (macrophages) and umbilical

cord and lung cells, six and 24 hours after exposure to particulate matter.

The results showed that clotting factors, which thicken the blood, were enhanced in almost all the cell types. The rate of death in immune cells also significantly increased, and exposure to the pollutants boosted inflammatory activity.

The authors say their findings suggest that particulate matter has the ability to alter cell function so that it promotes thickening or coagulation of the blood. And they point to

*provided by British Medical Journal*  
a potential synergy between the factors that boost inflammation and blood thickening.

Ultrafine particles of inhaled particulate matter can enter the bloodstream, raising the possibility that their “thickening” effects on macrophages might have an impact on the plaques found on artery walls. Macrophages are a major component of arterial plaques.

To view full paper, visit [http://press.psprings.co.uk/oem/march/164\\_om14951.pdf](http://press.psprings.co.uk/oem/march/164_om14951.pdf). **ET**

## Protein plants

(cont. from page 29)

protein and the King of all grains. It has the highest percentage of protein content at 16 percent per volume! This means that a measly ¼ cup (dry) quinoa has 6 grams\* of protein. If you paired this grain with a couple of spears of asparagus and a beautiful cauliflower, broccoli and sprouted mung bean stir-fry, you would have an easy meal with 30 grams of protein or more!



### Health Benefits of Quinoa:

**Magnesium:** Relaxes muscles and blood vessels, which can help regulate blood pressure.

**Manganese and copper:** Both work as antioxidants to protect the body from

free radicals.

**Lignans:** A phytonutrient found to reduce the risk of heart disease as well as certain types of cancer.

Quinoa is also a good source of iron, calcium, potassium, zinc, vitamin E, selenium, manganese, tryptophan copper, phosphorus and more. **ET**

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## State conservation bills and good government

**E**arthFair is an eclectic mix of activities for children, a showcase for innovative new technologies, spectacular art and great music, with an overarching emphasis on the conservation of resources as we reduce, reuse, and recycle.

EarthFair celebrates its 23rd Anniversary this year, and over those years we have seen dramatic changes in technology. But what has remained constant is the enthusiasm with which San Diegans have embraced both the challenges and opportunities presented to us. Congratulations to Carolyn Chase and the hundreds of volunteers who each year allow 60,000 people of all ages to gather in Balboa Park.

My focus in Sacramento continues to be on the issues that San Diegans hold dear: water quality, reducing the fire danger in our wildland urban interface, protecting open space in urban areas, assuring an adequate water supply for our region, pushing for more transit options for local commuters, and implementing AB 32 and SB 375 to reduce our state's greenhouse gas emissions.

California has led the way to reduce the effects of climate change, and San Diego has taken a leadership position to facilitate the use of electric vehicles and installation of rooftop solar – on homes, schools, and government buildings throughout the region, including our military bases.

Several of my bills this year have direct San Diego connections. Mayor Sanders and the City Council are sponsoring SB 1169 to finish the work we started with SB 373 in 2007 that converted more than 6,600 acres of designated open space owned by the city to dedicated open space. Many of our urban canyons and park land now cannot be sold or traded without a two-thirds vote by the people. My new bill enables the city to provide that same level of protection to approximately 10,000 more acres of urban canyons and parkland.

The San Diego County Board of Supervisors is sponsoring SB 1331 that would enable the Board of Supervisors to ask the voters to support a Charter change so that the redistricting of the supervisorial boards following the

2020 census would be done by a panel of retired judges, rather than by the Board of Supervisors itself.

Work continues with local stakeholders on finalizing the language for SB 623 that will remove copper in hull paints used on recreational boats. This is a specific problem identified in the Shelter Island area of San Diego Bay that affects water quality throughout the state.

SB 1094 and last year's SB 436 that is now law, afford long-term protection for lands set aside as mitigation for specific projects by guaranteeing that funds are protected to manage the mitigation lands.

SB 1207 will ensure that good fire prevention efforts are incorporated early in the land use planning process for areas in high fire risk zones.

Discussions continue in Sacramento on the fate and content of the \$11 billion water bond to fund long needed improvements to the Bay-Delta and other projects throughout the state. It is unclear whether the bond measure will remain on the November ballot or whether it will remain at \$11 billion.

In the meantime, the state is considering whether to build a canal or a series of tunnels to move water from northern California to southern California, avoiding the fragile Bay-Delta. Thirty years ago the state was divided, north versus south, on whether to construct the Peripheral Canal to bring a guaranteed water supply to southern California. Voters soundly defeated the ballot measure. Today, in addition to concerns about the health of the Bay-Delta, the pumps bringing fresh water to the south are subject to being shut down to protect fragile species.

The San Diego region has been effective in conserving water over the past 20 years. But with the region set to add another million people over the next 30 to 40 years, we must ensure that local residents and businesses have an adequate supply of water in order to maintain our quality of life and to support our economy.

Our region is home to several local companies developing algae-based fuels that show great promise to help America reduce its

dependency on fossil fuels. This is the kind of innovation and entrepreneurship that will help lead our region, California, and the United States out of the recession and into future prosperity.

So as we gather at EarthFair this year, let's reflect on what we as a region have done to protect our environment, and recommit ourselves to making our region a showcase for green technology, alternative fuels, solar energy, and water quality for our children and our grandchildren. **ET**

*Senator Christine Kehoe (D-San Diego) represents California's 39th Senate District. The district encompasses 847,000 residents from the City of San Diego, City of Del Mar, and parts of Spring Valley, Lemon Grove, and La Mesa.*



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