

OCTOBER
2006

Note
meeting place:
East Police Station

October Meeting

Topic: Why It's Hard to Breathe in Arlington (and what you can do about it)

Speaker: Jim Schermbeck,
Downwinders at Risk

When: Wednesday, October 11,
7:00 pm (Social 6:30 pm)

Where: East Police Station,
2001 New York Avenue

This issue of the *Post Oak* is dedicated to the memory of Earl Burnam, 1926-2006, committed environmentalist and genuine gentle man whose love of nature and tireless work on behalf of clean air and water and habitat preservation inspired many of us. His example will not be forgotten.

Change a Light Day

Mayor Robert Cluck Promotes Energy Efficiency

(Editor's note: October 4 is past but there's nothing to stop us from changing light bulbs in our houses any time we want to take a step toward helping our environment.)



On October 4 Facility Services staff replaced 52-watt bulbs with 20-watt fluorescents that produce 75 watts. Rene Fuentes (left) and Johnny Hernandez (right) made the change in council chambers.

Mayor Robert Cluck encouraged Arlington residents to observe October 4 as Energy Star Change a Light Day with a pledge to change at least one light to an energy-efficient model.

The pledge will help Arlington save energy, money, and reduce greenhouse gas emissions.

If every resident in the city changes at least one bulb, the city could save a total of 93,897,258 kilowatts of energy and could help prevent more than 148 million pounds of carbon dioxide emissions from entering the atmosphere. This is equivalent to removing about 2,361 cars from the road.

The Energy Star program was created by the Environmental Protection Agency and the Department of Energy to help consumers save money and reduce air pollution.

The mayor is encouraging Arlington residents to switch to light fixtures or bulbs that have earned the Energy Star label, a designation that the products meet strict energy efficiency standards.

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From the President Wayne Halliburton



Photovoltaic cells were first invented over 50 years ago, but advances in technology, falling manufacturing costs, rising fossil fuel prices, and

global warming concerns are prompting renewed interest in solar energy.

In Japan, the worlds largest solar power market, the government expects as much as 50% of residential power will come from solar energy by 2030. California is hoping to overtake Japan as the world's largest solar market with its "Million Solar Roofs" program, which will provide \$3 billion in rebates to consumers installing rooftop panels. California also recently passed legislation aimed at a 25% reduction in greenhouse gases by 2020.

Silicon Valley expects the solar industry to grow from an \$11 billion market in 2005 to a \$51 billion industry in 2015. Manufacturers such as Applied Materials Inc. are retooling their plants to make solar panels out of the same



Part of the solar array at a LEED-certified building at the old Dallas Naval Air Station.

material they used to make microchips. Their challenges are twofold. They have to bring down costs so that companies and individuals are enticed

to switch from their utility company to solar panels, and they have to find an alternative to polysilicon, whose use for solar manufacturing exceeded its use in making microchips for the first time this year.

Alternatives include thin film solar cells made of copper and selenium and the plastic paint composites used in nanotechnology. These paints harness the sun's infrared radiation, working even on cloudy days, and are as much as 5 times as efficient as conventional solar panels.

A new generation of scientists is also being groomed. The third "Solar Decathlon" will be held next fall in Washington, D.C. (see www.eere.energy.gov/solar_decathlon for more). Twenty teams will be invited to design, build, and operate energy-efficient solar-powered homes. The finished homes will be assembled on the Mall in Washington for a week-long display.

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THE POST OAK

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Thanks, A.C.C. for working to conserve Arlington's natural resources!

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New York Avenue Blackland Prairie Jan Miller

There's been lots going on at the prairie: There was a great turnout for the prairie's first field trip on Saturday, September 30. Special thanks go to North Texas Master Naturalist (MN) Jim Varnum who led the group and helped coordinate the event with Dallas and Tarrant county MNs. Jim's talk highlighted the fall-blooming wildflowers and grasses, restoration efforts, and the prairie's gilgais. The prairie is always generous, and despite the drought we saw blooming liatris, pitcher sage, brickellia and grasses just beginning to bloom. On the wing, we saw a Northern harrier plus lots of monarch butterflies on their trek south to Mexico. Thanks to everyone who attended. We'll plan another field trip for spring 2007.

Dr. Marcy Brown Marsden's recent Plant Sampling Techniques Workshop offered instruction and hands-on activities for tracking and quantifying plant growth from year to year. This type of study would be very helpful to track restoration efforts at NYABP. Volunteers will be needed to design the study and to perform the surveys probably twice each year.

The first fall NYABP workday of 2006 will be scheduled for late October. If you're interested in participating with surveys, workdays or field trips, contact me at jgmiller5594@sbcglobal.net or 817/483-0579.

Evidence of vehicular traffic on the prairie was noted recently at NYABP, but Scott DeGrant's crew moved in quickly to prevent further access. And, great news! Scott reports that APRD plans to build a split-rail fence across the New York Avenue side of the prairie in early October.

Development is underway for the industrial warehouse that will border NYABP on its north and east boundaries. APRD continues to negotiate for the most effective and natural buffer area possible.

Contact of note: "Jim's This and That." If you'd like to stay in touch with news of the natural world, including a listing of many local field trips, workshops, etc., subscribe to this twice-monthly e-mail from Jim Varnum. Although many events are in the Dallas area, he also includes Tarrant county events and provides a great 'crossroads' function to share information. To sign on, contact Jim at JEVarnum@aol.com.



Prairie enthusiasts enjoyed touring the New York Avenue Prairie on September 30. Jim Varnum (left) provided lots of information for the enthusiastic group.

Thanks to Our September Speaker



Last month Arlington's Neighborhood Coordinator, Regina (RJ) Blair introduced us to the Strong Neighborhoods program and gave us ideas on how ACC can increase its effectiveness. RJ is shown here (left) with longtime ACC member Martha May Martin (right).

More on Town Center



On September 18 WeCAN hosted Jim Kwasnowski of Steiner + Associates. He spoke on the continuing evolution of plans for Glorypark, the huge development that might worsen conditions along Johnson Creek. Or not; we still can't tell from current plans.

From the President *continued from page 2*

Texas as well as the federal government has programs in place to help defray the cost of installing solar panels, which are becoming cheaper and more efficient than ever. See programs at the State Energy Conservation Office Web site, www.seco.cpa.state.tx.us/re_incentives.htm, or www.kicktheoilhabit.org and be part of the revolution.

Change a Light Day *continued from page 1*

Lighting accounts for nearly 40% of the average home's electric bill. Americans spend more than \$20 billion a year in energy costs to light their homes. Energy Star qualified light bulbs use at least two-thirds less energy than standard bulbs and can last up to 10 times longer.

The Mayor's Message on the City of Arlington Web site provides more information about the Energy Star campaign at www.ci.arlington.tx.us/mayor or www.energystar.gov/changealight.

Wildscape Update John Dycus



Fall has finally arrived, and never has it been so welcome. With it come exciting possibilities for the wildscape.

From a small beginning 12 years ago with half an acre, Molly Hollar and her wildscape wonder crew are on the cusp of completing basic planting in nearly four acres — a milestone in wildscape history. Led by propagation leader Pat Lovejoy, the volunteers have grown hundreds of plants, enough to finish covering the bare places. Most of the plants have been grown from seed and cuttings collected within 50 miles, so they are adapted to local conditions of heat, cold, rainfall and soil.

Late September through October is the best time to plant in North Texas because it's cooler with the highest chances of natural moisture. Still, my dad used to say it's hard to get rain in a drought. If it rains, great. Molly likes the

odds and suggests increasing the planting in October.

Another argument for maximum planting now is the tenuous condition of the greenhouse. It is old and little used but has been kept functional by Arlington Parks & Rec (hooray for Heather Dowell!) in spite of complications, mostly for wildscape benefit. Getting these plants in the ground this fall rather than wintering them in the greenhouse would eliminate stress for Parks & Rec personnel.

Therefore, more volunteers are needed. And there will be no plant sale this fall, to allow the volunteers more time for planting.

Choose any Saturday morning this month. Planting should be easy, with the plants in quart and gallon containers. Bring gloves, shovels and trowels if you have them. Water, coffee and snacks will be provided, as usual.

From Molly, the last word: "Please find a Saturday morning to come and help move the wildscape a giant leap forward while enjoying the birds, butterflies, lizards, turtles, dragonflies and other wonderful wildlife during this lovely fall."



Last month the Wildscape got a big boost from members of Rotary Club of Arlington South.

Fall/winter hours beginning in
 October: 9 a.m.-noon
 Tuesday mornings: 9 a.m.-noon
 Saturdays during remainder of 2006: 9 a.m.-noon
 October Only: any Saturday
 November: 1st Saturday, Nov. 4
 December: 1st Saturday, Dec. 2

Odds and Ends Grace Darling

More on Green Building

Arlington's Citizens Environmental Committee (CEC) is currently studying the feasibility of adopting LEED standards and other eco-friendly construction practices for all city buildings, as well as various strategies to promote sustainable design of private residential and commercial properties. The CEC's report is expected to be presented to City Council in November, and you'll read in the *Post Oak* when the item goes on the agenda.

Seattle Fights Global Warming

To try to solve the global warming problem, Seattle is offering developers incentives to build energy-efficient green buildings. At the new City Hall, a lushly planted rooftop insulates the building and catches rainwater for use in flushing toilets, which saves a million gallons of water a year. The city has converted much of its fleet of city vehicles to biodiesel fuel and encouraged the state ferries to use it. And by the end of this year, Seattle City Light will be the only utility in the country with zero net emissions of greenhouse gases. The business opportunities in reducing greenhouse emissions are

enormous. As one Seattle entrepreneur puts it, "We're doing it not because we want to change the energy policy of the U.S., we're doing it because there is an economic benefit for us."

Horned Lizard Lives

On September 14 the Tarrant Coalition for Environmental Awareness invited Walt Dabney, Director of Texas Parks and Wildlife, to address citizens concerned about the shameful decline of our state parks. Mr. Dabney confirmed the recent reports in the *Star-Telegram* and explained that reductions in budget allocations

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Environment and population Ulrich Herrmann

Whatever environmental action is taken, its effectiveness depends largely on the number of people in that area at the time and for years to come. To use a few locally important examples:

- **Traffic congestion:** The usual (19th century mind-set) remedy is to build more roads, with the consequence that more space becomes available for more settlement and after initial relief the traffic congestion becomes worse than before. Imagine what Gov. Perry's masterpiece, the Trans-Texas Corridor, will do, even without the increased pollution from all those beautiful Mexican trucks.
- **Air pollution:** Obviously it increases as the number of people increases. This effect is enhanced by the increased traffic congestion and the longer times cars are idling in traffic jams. Considering our non-attainment status, I find it difficult to imagine that we will ever solve the problem if we continue our efforts to get more people into our area.
- **Use of energy:** Many people argue that Texas, particularly the Metroplex, will be unable to provide enough electrical energy for extended hot periods with an ever-increasing population. Therefore, argues Gov. Perry, we need to build more than 10 power plants using cheap coal, the dirtiest but cheapest—and we need the plants as soon as possible, hence the request by him for a fast-track permitting process. Of course, if our population were not increasing at such a fast rate, we could take our time and have a decent, reliable permitting process that takes into account the best available technology.
- **Water:** The Texas Water Development Board submitted a draft in August 2006 about the need to provide reliable water resources for the increasing population, expected to double in the next 50 years. Can you possibly imagine twice the number of people on our roads, our lakes, playgrounds, parking places, etc.? It says in the TWDB brochure: If we do nothing, 85% of Texans will not have enough water. So the TWDB proposes to drown many acres of fertile lands and irreplaceable habitat to build new reservoirs.
- **Pollution by cement kilns:** This is one of the few examples I can think of which is independent of population, but it's terrible nevertheless.

To put it my way: If we do nothing, then those multitudes of new people would not even come to this area and we would not need all that water—and neither would we need those 10+ dirty coal-fired power plants and it would be much easier to get clean air. We would not have to destroy so much of nature to accommodate all those people. Frankly, who needs them?

Odds and Ends *continued from page 4*

over the past 10 to 15 years are responsible for today's park problems. Backed by long-term, stable funding recommendations issued by the State Parks Advisory Committee, TPWD is proposing a budget of \$85 million for 2007-08 that will be considered by the state Senate Finance Committee on Monday, October 9. Though it is estimated that more than \$850 million is needed to bring the facilities up to par, Mr. Dabney is confident he can begin the repair and replacement process with this modest appropriation. Everyone is encouraged to call and send letters in support of funding for Texas Parks and Wildlife.

Draft State Water Plan Flawed

The following is excerpted from the Web site of the Sierra Club Lone Star Chapter:

"This new version of the State Water Plan still falls woefully short of being a comprehensive plan that we can rely on to provide for our water needs for the next 50 years while protecting the natural heritage we love.

"Instead of focusing on cost-effective solutions, we've ended up with a long and wildly expensive wish list of water development projects (\$31 billion!) that, if realized, could leave the state with dry rivers and empty pockets. "[The draft plan] doesn't sufficiently provide for aggressive water conservation, doesn't factor in water savings from drought management measures, doesn't ensure adequate protection of agricultural and natural resources, and doesn't meet water needs at a reasonable cost.

"In Region C (Dallas-Fort Worth), [the draft plan] fails to include strong water conservation measures and calls for four

massive new reservoirs costing over \$3.3 billion, even though enough water to meet all projected needs is available without these. The 2007 State Water Plan should aggressively lead the way in water conservation—typically the least expensive and least environmentally damaging water supply.

"We can provide for the water needs of our growing population in a fiscally responsible way while also protecting the environment, but to do so we must go about water planning in a more conservative and deliberate fashion."

ACC joins the Sierra club in urging you to call or write members of the Texas Water Development Board to express our concerns.

Clean Air Marianne Herrmann

Some progress has been made in the fight for clean air, and the increasing public awareness and concern about the proposed coal-fired power plants surely has something to do with it. So let's keep up the pressure!

Recently a coalition of Texas cities led by Mayor Laura Miller was formed to investigate the impact of the proposed power plants on our air. So far, no valid studies have been done. It is impossible to come up with a State Implementation Plan to reduce air pollution when we have no data we can trust on the impact of these new pollution sources.

Another event: A federal judge has ruled that the permit for the proposed Oak Grove coal plant should be denied because TXU has not proved the emissions will not be exceeded. Now this permit has to be voted on by TCEQ, hopefully on October 18 or November 1, as proposed by Blue Skies Alliance Executive Director Wendi Hammond. Otherwise it will be after January 1 and after the election! We need to take action and contact our state representative and state senator ASAP and ask them to oppose this and the other permits. The TCEQ is required to listen to them. Tell your elected officials that our area's air quality will worsen, and demand that the energy companies use the best available technology for new coal-fired power plants.

Also, a lawsuit has been filed by Texas citizens in federal court against TCEQ, TXU and EPA for violations of the Clean Air Act. More suits will follow shortly.

Action item cement kilns: Please contact city, county, state, and federal elected leaders to commit to cracking down on the cement plants. They need to install up-to-date anti-pollution equipment to lower ozone levels in the DFW area.

Learn more at the October ACC meeting. The next Blue Skies Alliance meeting will be held Wednesday, October 25, at 7:30 p.m. at the West Police Service Center, 2060 W. Green Oaks Blvd.

Green Building Danny Kocurek

(Editor's note: Below is the first in a series that will follow the ups and downs of a local family's efforts to build a sustainable home.)

About 18 months ago my wife decided we needed a back yard. We have a narrow strip of weeds and dirt, but no place for our kids to play. That seemingly small decision started us on an interesting journey that we have been asked to document for people who might be considering a similar path.

We began by making a list of things we disliked about our current house and wanted to do differently in our new one. Other than the small back yard, most everything else on the list dealt with how energy inefficient our current house is. From the giant southwest facing picture windows to the poor insulation and the 150 degree attic temperature, we had a huge list of things we wanted to do differently. Having never built a house before and having no knowledge of architecture or building, we didn't know where to begin. So we started googling.

There are some great resources on the Web, although they took a while to find. The City of Austin has a fantastic

Web site and their "Sustainable Building Sourcebook" is a great review of different building techniques and devices. Sites like pathnet.org, toolbase.org, and buildingscience.com have volumes of information and reviews of studies to determine what works and what is a waste of time. This led us to our first surprising discovery. There is an annoying dearth of science behind many of the green building claims.

Although things like energy recovery ventilators and heat recovery drains sound like a good idea, they haven't been proven empirically. I approach most things using the basic scientific method. You can talk to me all day about why your product is great but I am not going to buy it until you prove it. Let's take hot water recirculating pumps as an example. These are pumps that constantly circulate water from your hot water heater through the hot water pipes. The idea is that you decrease the amount of water that is wasted down the drain waiting for the hot water to get from the heater to your faucet. The problem is that you have used electricity running the pump. Additionally you have lost energy by having to reheat the

water that cools as it runs through the pipes all day long waiting for you to turn on your faucet. In the end, the question of whether the water saved is worth the energy used is difficult to answer. This lack of empirical data comes up frequently in green building.

You can spend a lot of time, at least 18 months so far, trying to figure out what you want to put in your new home. At some point, though, you have to find someone who can translate your dreams into an actual structure.

You would think it would be easy to find someone to design and build a green house. You hear stories in the news all the time about how popular it is. Think again. In north Texas, it is a very small niche market. We googled our hearts out and emailed scores of people from the Austin Green Building Program without success. Eventually I found an obscure reference to a builder in Dallas who had won an award for a green renovation. He didn't do residential construction but directed me to an architect in Dallas. Although we were grateful to find someone to design our house, we were a little distressed

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Green Building *continued from page 6*

when the architect said there was only one builder in North Texas with whom he would work. He told horror stories about how ignorant builders had messed up his designs repeatedly, causing delays and costly corrections.

I am a very strong believer in the free market. I don't mean the George Bush version where connections outweigh cost, I mean the real free market where there is a level playing field. Having only one builder and one architect bidding on our project made me uncomfortable, so I asked the builder if he knew of any other architects he would recommend. In the entire Metroplex, he could think of only one other who was knowledgeable in green building design. At least that was a little competition, and it ended up being very beneficial. It led to our next important lesson in green building: supply and demand. Because the supply of knowledgeable architects and builders is so limited, the cost for services comes at a premium. We decided to go with the newly referred architect, partially for economic reasons and partially because he seemed a good fit with what we had envisioned.

As with any conservation measure, the most important and beneficial change you can make is to "reduce." Our current home is 4200 square feet, which although average for new custom homes, is way too big. Even worse, the design is so poor that much of the space is wasted. We discovered Sarah Susanka and her series of "Not So Big House" books early on and have followed her philosophy of designing a place to live that is flexible and efficient. This means not building rooms that are going to be used infrequently, like a formal dining or living room. By making plans for the office to be easily converted to a guest bedroom, we were able to save more space. Although our house will not be small, we were able to reduce our current square footage by 25% while actually making our living space larger.

The next question that comes up repeatedly is, "How green can you afford?" Many green technologies are actually cheaper than the traditional technologies they have replaced. These include advanced framing, which uses less wood, is faster than traditional framing, and produces a house that is better insulated. It is shameful that so few local builders have adopted this technique.

Most green technologies have short payoff periods, meaning they cost more initially but the extra cost is rebated quickly by the energy and money saved on electricity and gas. Examples are fluorescent light bulbs, energy-efficient appliances, thicker insulation, solar hot water heaters, better windows and tighter sealing. These are rarely used by builders because the more money they save up front while building, the more money they take home. Sadly, most new home buyers are only interested in how a house looks and learn about the added utility costs after it is too late. The few thousand dollars saved by the builder can cost the homeowner thousands of dollars each year.

There are a few technologies, though, that have payoff periods that are so long they might not pay off. The most famous of these is solar electricity or photovoltaics (PV). While PV provide free electricity derived from the sun, the payoff period for PV is estimated to be 15-20 years, which is an investment many people cannot make. In some states, notably New York and California, state rebates can shorten the payback time to less than 10 years. This is the reason PV is more common in certain parts of the country.

Panelists Discuss Climate Change

On October 2 the League of Women Voters of Arlington presented an excellent program in which four panelists offered their perspectives on the effects of global warming in our lives. The discussion ranged widely, from worldwide events 80 million years ago to the implications of changing a light bulb today, and the program deserved the attention of a much larger audience.



The panelists from left to right: Dr John Wickham, Chairman, UTA Geology Dept., Arlington Mayor Robert Cluck, Don Callaway, Sierra Club representative, and Dr Michael Larranaga, UNT Health Science Center.

ACC Wins Regional Award

The ACC-Arlington Parks & Recreation Dept. mutual admiration society has just taken another step: Oscar Carmona, Interim Assistant Parks & Recreation Director, tells us that their nomination of ACC for the TRAPS regional group advocate award has been successful. TRAPS is the Texas Recreation and Park Society, a 65-year-old group devoted to advancing many of the issues that ACC holds dear.

Thanks to our Parks guys, TRAPS has previously honored ACC's Julia Burgen and Molly Hollar for their efforts. These ladies are tough acts to follow, and we'll have to work pretty hard to keep up with them.

Oscar plans to submit our nomination for the state award; his enthusiasm for ACC makes it clear that our Parks people see us as valuable partners. We've got a lot to live up to; let's hope we succeed.

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Don't Forget!

October 11
Jim Schermbeck

*Why It's Hard to Breathe
in Arlington
(and what you can do about it)*

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