

Happy New Year! Please note some changes and/or new offerings:

- **All 2006 4-H Natural Resources & Environmental Education contest rules can be found at:**
<http://www.aces.edu/fourh/NaturalResourcesandEnvironmentalEducation.php> .
Scroll down to the 4-H Natural Resources Events & Adult Leader Trainings section.
- **There is a special artwork contest to design the logo for the new 4-H ATV Safety & Ethics program. The deadline is June 1. The rules will be posted at the above-web address on Monday 1/9.**
- **The 2006 4-H Wildlife Habitat Evaluation Contest Date has changed to June 20-21. The location remains the same.**
- **Send your volunteers to the 4-H Volunteer Leader Forum on February 24-25 at the 4-H Center to receive training in archery, air rifle, shotgun OR sportfishing. All of these trainings will end at 6:00 p.m. on February 25.**

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1. HUTTON JUNIOR FISHERIES BIOLOGY PROGRAM

Application Deadline: February 15, 2006

This summer opportunity for high school students is sponsored by the American Fisheries Society. Students (grades 10-12) spend 8 weeks in the summer working alongside a mentor who is a fisheries professional in their local community. Participants receive a \$3,000 scholarship paid out in 6 installments over the summer months.

Applications can be downloaded from the website.

<http://www.fisheries.org/html/hutton.shtml>

2. "LEARN & SERVE AMERICA" GRANT

The Corporation for National & Community Service "Learn and Serve

America Grant Programs."

Community-Based Program Deadline: March 7, 2006

School-Based Grant Program Deadline: Multiple (see guidelines)

Higher Ed Program Deadline: February 28, 2006

See Web site for details.

http://www.learnandserve.gov/for_organizations/funding/nofa.asp

3. "UNSUNG HEROES" AWARDS

Deadline: May 1, 2006

The Ing Unsung Heroes Awards are given to K-12 educators pioneering new methods and techniques that improve student learning. 100 finalists will receive an award of \$2,000. 1st place receives \$25,000; 2nd place \$10,000; and 3rd place \$5,000.

http://www.ing-usa.com/us/about/connect/education/unsung_heroes.html

4. FREE EARTHSORE ENVIRONMENTAL AUDIT & GUIDE

EarthScore: Your Personal Environmental Audit & Guide

48 pages, 8 ½ x 11 with pullout EarthScore chart, paperback.

To request a copy, e-mail jdhowell@ix.netcom.com or mail to: Jack Howell, Morning Sun Press, 1240 Quandt Road, Lafayette, CA 94549

<http://home.ix.netcom.com/~jdhowell/id6.html>

5. WAVE THAT SHOOK THE WORLD

Nova Web site based on the PBS television program and tells the story of the 2004 tsunami that spread for 3,000 miles around the Indian Ocean basin. Site offers video footage, detailed animation, and scientific analysis.

<http://www.pbs.org/wgbh/nova/tsunami/>

6. NATURE QUEST GAME WITH A "ROLY-POLY"

Anyone can play this game. First, you need to find a roly-poly-a tiny pillbug. Check under boards, in leaf litter, or under rotting logs outdoors. Scoop up the pillbug in a cup. Next, try putting it on your hand.

What does it do? Does it roll up? See if you can get it to climb up your arm. Does it tickle? (Don't worry-it won't bite or sting.) Be sure to put your roly-poly back when you finish being a climbing toy. Wow, what was THAT like?

More stuff to do with a roly-poly:

**Turn a ruler or yardstick into a pillbug track. Put your pillbug on one end of the ruler, and then time it to see how long it takes to walk the whole length. Try it with several pillbugs to figure out which one is the fastest.

**Make a pillbug maze. Use a shoebox as the base, and build a maze out of Legos, dominos, or other little blocks. Then see how long it takes your pillbug

to find its way through the maze. How does it make its way around? Are there places in the maze where it likes to pause?

Source: National Wildlife Federation. For more fun stuff to do with pillbugs, check out Rolypolyology by Michael Elsohn Ross, published by Carolrhoda Books, Inc. (ISBN 0-87614-862-3)

7. RANGER RICK'S FUN & GAMES

To play web-based games dealing with termites, fish food, bird brains, apes and frogs, go to

<http://www.nwf.org/kidzone/kzPage.cfm?siteId=3&departmentId=77>.

8. FEDERAL CARTRIDGE PRE-PAID YOUTH DIRECT SALE AMMO ORDER

22 Rimfire, Metro Sub-sonic, Top Gun & Estate Target Loads

(Contact Emily Kling for a hard copy of the form. Email : klungeb@auburn.edu)

(Internal use only)

Date: _____

Account: _____ credit card

#12071510

_____ cash sales #11736710

Cost per Ga Case	Load	Velocity Total	Dram	Shot	Number of Cases			
			Equiv.	Charge	7 1/2	8	9	
12	TGL12	1145	2 3/4	1 1/8 oz	_____	_____		
		\$ 32.00/cs						
12	TG12		1200	3	1 1/8 oz	_____		
		\$ 32.00/cs						
20	TG20		1210	2 3/8	7/8 oz	NA	_____	
		\$ 32.00/cs						
12	M123 **		900	Sub-Sonic	1 1/8 oz	_____		
NA	NA	\$32.00/cs						
12	SS12L1*	1180		2 3/4	1 oz	_____		
		\$32.00/cs						
2	3/4 oz	NA	8 1/2 -				28 T280	1230
							\$58.00/cs	

* Estate Cartridge load. Comparable Estate shot shells may be substituted for Top Gun

** Metro Sub-sonic may not function in SEMI-AUTOMATIC SHOTGUNS

10 BOXES - 250 ROUNDS PER CASE

Sub Total

\$ _____

MINIMUM OF 5 CS SHOTSHELL and 2 CS 22 RIMFIRE PER ORDER

Caliber	Load	Bullet Wt	Bullet Style	Velocity	Rds/cs	Cost/cs	No of Cs
Total							
22	510	40 gr.	Solid	1260	5000		\$89.00
		\$ _____					
22	711B	40 gr.	Solid		1080		5000
\$189.00		\$ _____					

ORDER NEEDS OFFICIAL LETTER WITH LETTERHEAD AND EXPLANATION OF USE

Total Value: \$ _____
MUST BE DELIVERED BY: Sales Tax * ** \$ _____
*** If Tax Exempt - NEED
Exempt Form Included
FREIGHT IS PAID. Grand Total Due:
\$ _____

Method of Payment: check credit card: Visa MasterCard Expiration date _____

Signature: _____ Card #: _____

Name on credit card: _____

Ship to Name: _____

Ship to Address: _____ (NO P.O. BOX)

Phone: _____ (must include)

Reason for use: _____

Make check out to Federal Cartridge Co

Mail To: Bill Stevens: Conservation Manager, 900 Ehlen Drive, Anoka, MN 55303

Phone: (763) 323-3827, Fax: (763) 323-2506

10. DRIVERS ATONE FOR EXHAUST WITH CARBON OFFSETS

By Linda Baker | Contributor to The Christian Science Monitor 1/05/06

As a business and fundraising consultant, Pat Castleman drives about 1,000 miles a month. So when the Mill Valley, Calif., resident heard that she could "neutralize" the greenhouse gas pollutants emitted by her new Infiniti sedan, she jumped at the opportunity.

By signing up with DriveNeutral, a nonprofit launched in October by students at the Presidio School of Management in San Francisco, Ms. Castleman was able to

calculate her "climate change footprint," using simple online calculators. To neutralize that footprint, she bought greenhouse-gas emissions reductions, also known as "carbon offsets." Castleman paid \$25 to compensate for about five tons of carbon emissions a year - plus a DriveNeutral decal proclaiming her vehicle's carbon-free status.

"I always feel slightly guilty when I'm driving around the Bay Area," says Castleman. "This seemed like a great way to contribute until we can develop alternative energy."

Although the United States is not a signatory of the Kyoto Protocol, an international treaty that imposes mandatory greenhouse-gas reductions beginning in 2008, a growing number of cities, states, and businesses are developing market-based programs to buy and sell pollutants that contribute to global warming. These initiatives include underwriting clean energy technology or purchasing carbon offsets generated by planting forests or recapturing methane gas released from cow manure.

DriveNeutral and its competitors signal a new, consumer-oriented approach to the fledgling greenhouse-gas emissions market. But although most climate-change analysts support the concept of buying individual offsets, they are quick to point out the pitfalls.

"It's 'buyer beware,' " says Mark Trexler, president of Trexler and Associates, a climate services company in Portland, Ore. Without a government-imposed cap on emissions, he says, it's difficult for consumers to know if the pollution reductions they paid for actually took place.

DriveNeutral compensates for pollution from a person's car by participating in a voluntary emissions trading market called the Chicago Climate Exchange (CCX). The 130 corporations, nonprofits, and governments on the exchange are legally bound to achieve annual reductions in carbon dioxide emissions, either by reducing them internally or by buying "emissions credits" from companies that have exceeded reduction targets.

Individual buyers cannot participate in the CCX. But because DriveNeutral is an associate member, it buys blocks of credits and divides them into increments tailored to fit the ecological footprint of an individual automobile. The \$25 Castleman paid to offset her Infiniti reflects the current price of carbon, about \$1.50 per metric ton.

After purchasing emissions credits, DriveNeutral takes them off the market. "We intervene, and the overall pool of allowable credits goes down," says CEO Jason Smith. As a result, CO₂ emissions decline, while market demand for credits increases, he says.

Over the past two months, DriveNeutral has claimed 600 metric tons in CO2 reductions through 125 car certifications. A for-profit competitor, TerraPass, launched by students at the Wharton School of Business in Philadelphia last year, cites 19,000 tons in CO2 reductions and 2,500 certifications. Carbonfund, a nonprofit that offsets home, office, and transportation emissions, boasts 37,000 tons in reductions.

DriveNeutral's strategy is similar to that of the American Lung Association, which buys and retires blocks of credits on the sulfur dioxide (SO2) emission market. (It's a program that went into effect in 1995 to curb pollutants responsible for acid rain.) But unlike the SO2 market, participation in the CO2 market is voluntary. That's a million-dollar difference, analysts say.

Retail offsets teach consumers about their carbon footprint, says Michelle Manion, climate energy team leader for Northeast States Coordinated Air Use Management. "But there are no established rules for offset projects," she says. In many cases, CCX companies accumulate credits from emissions reductions projects that would have taken place anyway, Ms. Manion says.

For example, a company can earn credits simply by replacing outdated technology or by contributing to wind energy farms already subsidized by federal incentives.

Emissions retailers say they understood the challenges of pioneering a new market. TerraPass uses third-party verification to ensure projects follow "strict rules for additionality," says CEO Tom Arnold. Under the Kyoto Protocol, "additionality" refers to emissions reductions that happen in addition to those occurring under a "business as usual" scenario.

Mr. Smith says DriveNeutral's long-term goal was to build a viable carbon-emissions market. "The availability of low-hanging fruit will quickly diminish," he says.

Easy-to-implement credits stimulate trading, says Melissa McHenry, spokeswoman for American Electric Power, a CCX founding member. "The whole premise is that you can achieve environmental benefits at the least cost." Through a combination of carbon sequestration and power-plant efficiencies, AEP reduced emissions from 166.4 million metric tons to 147.4 million in 2004. Ms. McHenry declined to comment on credits the company had bought or sold on the exchange.

Since its launch in 2003, CCX has traded 4 million tons of CO2 with a value of \$8 million. The European Union, which is preparing for mandatory emissions-

reductions targets under Kyoto, traded 230 million tons of CO2 in 2005 alone, with carbon selling at \$26 a metric ton.

Enterprises such as DriveNeutral aim to respond to federal inaction on global warming, says Ron Nahser, provost for the Presidio School of Management. "We see the potential for a grass-roots movement on the most pressing problem of our time."

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