



NEWSLETTER

February 2007

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A leading voice for a healthy and environmentally sustainable community.

Announcements

Next SAGE Meeting

7:30 p.m., Thursday, 1 Feb 2007

Fish & Game Hut 9th Ave & 10 St. S., Lethbridge

This is a regular Board meeting, but all members are welcome. Refreshments provided.

SAGE 2007 Annual General Meeting

7:30 p.m., Thursday, 1 Mar 2007

Fish & Game Hut 9th Ave & 10 St. S., Lethbridge

Please hold this date and plan to attend. Details on program will be in the March newsletter.

Oldman Watershed Council Membership

Deadline: 30 Jan 2007

Annual membership is free and open to all who live or work within the basin. As a member you receive regular newsletters and updates and are eligible to vote and run for the OWC Board. Phone 381.5801, visit www.oldmanbasin.org or email leda@oldmanbasin.org,

Oldman Watershed Council AGM

15 Mar 2007; Lethbridge Lodge

Mark your calendar and check www.oldmanbasin.org for more details as plans firm up.

Canada's Next Generation: Agriculture and Agri-Food Policy - Public Consultation Sessions

9:00-4:30, 2 Feb 2007; Sandman Hotel, Lethbridge

Individuals can participate in the consultations by putting forward their views in public meetings or online. To register visit www.agr.gc.ca/nextgen, email agrconsultations@agr.gc.ca or call 1-800-926-9105, by 31 Jan.

Knowing Our Place: Southern Alberta Environment

SACEE Summit #5

8:30 – 4:00, 22 Mar 2007; Galt Museum, Lethbridge

This is the fifth in a series of meetings organized by the Southern Alberta Community of Environmental Educators to promote environmental education. Visit www.sayee.ca for more information.

Alberta Ecotrust: Maximizing Effectiveness 2007

23-24 Mar 2007; Calgary

Sessions are planned on fund development for environmental organizations, green communications, governance and volunteer management.

Trails to Sustainability: A national environmental education conference

Thursday 24 May to Sunday 27 May, 2007

Delta Lodge at Kananaskis, Alberta

Visit www.trailstosustainability.ca.

Emerald Awards Nominations

Deadline: 28 Feb 2007

Recognize and celebrate environmental excellence by nominating someone you know. For more details visit www.emeraldfoundation.ca or call 1.800.219.8329.

SAGE News

Please Renew Your SAGE Membership – A membership renewal form is included with this edition of the newsletter. Thank you to all who have renewed.

Call for Nominations to SAGE Board – Nominations are open for the 2007-2008 Board. SAGE Board positions include president, vice-president and six directors. A secretary and treasurer will be selected from among the six directors. Terms are two years. To volunteer or submit nominations please contact past-president Sylvia Campbell at 328-6502. Elections will occur at the annual general meeting on 1 Mar 2006.

Earth Matters on CKXU (by Debby Gregorash, SAGE member) - Host Debby Gregorash (D.J. Gaia) will be interviewing Richard Mrazek at 9 a.m. Tuesday 6 Feb, on CKXU, 88.3 FM or www.ckxu.com on the internet (click on the "listen" box.) Mrazek is assistant dean of graduate studies and research at U of L. He and Alberta Sustainable Resources are hoping to reintroduce the Canadian Wildlife Federation's Wild Education back into the schools.

On February 13th at 9 a.m., D.J. Gaia will interview Linda Cerney about bird watching and bird counts. On March 6th, D.J. Gaia will interview Dan Johnson

about climate change and on March 13th, John Dormaar will be her guest. Guests on the other Tuesdays will be announced later.

Alberta Ecotrust Grants Update (by Klaus Jericho, SAGE rep on Alberta Ecotrust) - On 15 Nov 2006, Ecotrust Project Review Committee members, representing corporations and ENGO's, reviewed 13 community grant applications (maximum \$7,500) and nine Major Grant applications (maximum \$30,000). A total of \$148,000 was allotted for nine projects. The size of grants ranged from \$5,000 to \$30,000.

Three major grants have application to Southern Alberta: Crown of the Continent Conservation Collaboration (Yellowstone to Yukon Conservation Initiative), Southern Foothills Study (Southern Alberta Land Trust Society), and Alberta Parks: Let's Keep Them Wild (Canadian Parks and Wilderness Society).

On 15 Sep, 2006 the annual Multi-Year grant (\$20,000 per year for three years) was allotted to Habitat Enhancement for Seven Imperiled Species (Nature Conservancy of Canada Alberta Region).

Odour from Livestock Operations finally Accepted as an Issue (by Ann Baran, SAGE rep on CASA CFO Team) - At the Clean Air Strategic Alliance (CASA) Confined Feeding Operations (CFO) Project Team meeting in late November a few important keys issues were addressed and finally accepted by consensus. These include: (a) odour is a priority issue, recognizing that there are fundamental differences between odour and the priority substances; (b) odour is a natural result of livestock production; and (c) odour from livestock production constitutes a nuisance. The Team can now move ahead with addressing odour in its strategy for dealing with emissions from CFOs.

Issues and Updates

How Green in Biodiesel? – Biodiesel is fuel used in diesel engines derived from vegetable oils (soybean, sunflower) or animal fats. For most uses, it is blended with petroleum diesel to create a blend that is about 20% biodiesel (B20). There is considerable interest in manufacturing biodiesel in Lethbridge.

Is using biodiesel better for our environment than using petroleum fuels? As with most questions requiring consideration of effects on Earth's ecosystems, the answer is complex.

In 2002, the U.S. Environmental Protection Agency assessed the emission impacts of soybean-based B20 compared to petroleum diesel. They found significant reductions in emissions of particulate matter (10%), sulphates (20%), hydrocarbons (21%), carbon monoxide (11%) and ozone (10%) and a slight increase (2%) in nitrogen oxides. Study authors state "Although there is no clear difference in exhaust carbon dioxide (CO₂) emissions, benefits are the result of the renewability of biodiesel". The carbon in biodiesel emissions is recycled from carbon that was in the atmosphere, rather than introducing carbon which was sequestered in fossil fuels.

A study by the U.S. Departments of Agriculture and Energy (1998) concluded that the lifecycle emissions of carbon dioxide are substantially lower (16%) using soybean-based B20 compared to petroleum diesel. Pure biodiesel (B100) produces a 73% reduction in lifecycle carbon dioxide emissions. The lifecycle study followed major operations from production of soybeans and extraction of crude oil to use of the fuels in a diesel bus engine. It is agreed that some energy inputs and environmental overhead to produce biodiesel may have been missed but that shortfall also applies to petroleum fuel.

A 2005 study from Cornell University by David Pimentel and Tad Patzek concluded that producing biodiesel and ethanol, another biofuel, from crops uses more energy than the fuels generate. This study was proven in error due to a miscalculation.

An undisputed 2006 study by University of Minnesota researchers Jason Hill and David Tilman, among others, concludes that biodiesel derived from soybeans yields a significant net energy gain (93%) compared with petroleum fuels; gains are much higher than ethanol (25%) derived from corn. These researchers also found that emissions of greenhouse gases were 41% reduced from the production and use of biodiesel in transportation compared to gasoline. For ethanol, reduction in GHGs was 12%.

The University of Minnesota researchers caution reductions in GHGs hold only for crops grown on land already under production. Converting intact ecosystems to production would reduce benefits and may result in net GHG release from biofuel production.

Cutting down rainforest to plant palm tree plantations for palm oil production or ploughing up native prairie to grow crops that produce vegetable oils would also have negative environmental implications for biodiversity and watersheds.

Vast amounts of land and fresh water would be needed to produce enough biofuels to completely replace fossil fuels. To address this, experiments are currently underway, in South Africa and New Zealand, to produce biodiesel from algae in wastewater ponds. Producing biodiesel from animal fats destined for a rendering plant also holds promise in terms of greater environmental benefits.

A Strong Case for Not Using Plastic Bags - Canadians use six billion plastic bags a year! If each bag is half a meter long the bags would go around the earth 75 times. Their lifespan is about 1000 years.

According to research by the Vancouver Island Public Interest Research Group (VIPIRG), only one to three percent of bags are recycled and those that are require a labour intensive process to separate different types of resins with little return. The process of manufacturing plastic grocery bags uses significant amounts of energy and resources.

Another little known environmental effect is that millions of seabirds and mammals are reported to die annually from ingesting plastic.

(See the report *Plastic Grocery Bags: the Ecological Footprint* (2005) at www.viprig.ca.)