Saskatchewan ECO-NETWORK

NETWORK NEWS

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Seeds of Strength

Youth empowerment through native plants and community gardening

Seeds of Strength (SOS), an innovative project piloted in Saskatoon in 2001 is back again for another growing season. SOS brings together the Core Neighbourhood Youth Co-op, the Child Hunger and Education Program's Community Gardening project and Nutana Collegiate Institute in a partnership to help at-risk youth by working together to beautify their schoolyard and community with native plants.

Last year's project was a huge success. Grade nine students at Nutana planned and planted the first native plant garden at the Riversdale community gardening site at the corner of 19th Street and Avenue F. They also turned old plastic dumpsters into beautiful planters. Seeded with native plants and edible herbs and tended by the youth, they blossomed all summer long on the Nutana school grounds. The final accomplishment of the 2001 SOS team was a native plant guide with photos and descriptions of many of the plants identified on field trips and riverbank hikes.

Students involved in the pilot project still rave about the good times they shared during gardening workshops and field trips. Their teachers observe how these students grew as their gardens did, taking pride in their work and feeling good about being at school.

This year, SOS will be back with a new class of students. They will get to re-decorate the Nutana planters and make their own plans for what to grow in them. They will participate in workshops and field trips from grasslands to greenhouses and will help to plan and tend the native plant gardens at the Riversdale site, the Core Neighbourhood Youth Co-op, and Nutana Collegiate.

In addition, there is new emphasis on exploring the importance of native plants in aboriginal culture, including traditional medicinal and spiritual uses. Participants will also learn about the benefits of working according to a co-operative model. SOS youth will create their own webpage to share what they learned in their research about native plants. Once again, the staff of the three partnering organizations hope that the SOS project will help youth build skills and become empowered through native plant gardening.

If you would like to get involved as a volunteer, or if you have ideas or resources to share for this project, please get in touch with Sarah at CNYC: 242-4097, or Jodi at CHEP Community Gardening: 655-5379.

- By Sarah Polkinghorne, co-ordinator at Core Neighbourhood Youth Co-op

Introducing ... Dianne Manegre!

In January, Dianne Manegre joined the Eco-Network staff as administrative assistant, following in the wake of Cathy H. as she sails through the latest eco-event, sending warning shots over the bows of belligerent eco-bullies and generally keeping everyone up-to-date on everything there is to know.

Dianne has a background in community development, and has recently started an organic market garden business. Dianne is dedicated, diligent, diplomatic, and diphyodontal (with two exceptions).

Dianne has a keen interest in all things environmentally friendly, and is hoping to make a positive contribution while she meets all of the eco-folk and learns about current issues and happenings.

Saskatchewan Organic Farmers Launch Class Action Suit

On January 10, 2002 at Saskatchewan's Court of Queen's Bench in Saskatoon, a statement of claim was filed by two certified organic grain farmers on behalf of all certified organic grain farmers in Saskatchewan. The class action suit calls for:

1. Compensation for the damage caused to certified organic farmers resulting from the introduction of genetically engineered (GE) canola into the rural environment; and

2. An injunction to prevent the introduction of GE wheat.

The suit names Monsanto Canada and Aventis Canada. Monsanto sells GE Roundup Ready canola and Aventis sells GE Liberty Link canola. In 1998 Monsanto began confined field trials of GE wheat that is tolerant to its patented herbicide Roundup and is preparing to introduce it as a commercial crop as early as 2004. If the Saskatchewan Court of Queen's Bench certifies the suit, at that time other Canadian certified organic grain farmers will have the opportunity to opt in to the class action. The statement of claim is available on the website at www.saskorganic.com.

What is at stake?

- The right to grow organic crops. Organic certification standards prohibit genetically modified/ engineered organisms. Customers demand a ZERO tolerance level for GE contamination. The claim alleges that GE canola has spread uncontrollably so that prairie organic farmers can no longer grow GE free canola.

- The right to serve organic markets. The claim alleges that certified organic farmers in Saskatchewan have lost the opportunity to sell certified organic canola, which returns premium prices. This is a significant economic loss to farmers and the prairie economy.

- The right to eat GMO free food. GE canola is an example that shows GE crops cannot be segregated. If GE wheat is introduced it will likely spread and become part of our daily bread, whether we want it or not.

- The right to farm organically. Wheat is the foundation of agriculture in Saskatchewan. If certified organic farmers lose wheat as a crop due to GE contamination, it will be nearly impossible to operate an organic farm. Organic agriculture is a beacon of hope for prairie farming. It is growing, profitable, and healthy, and it supports farm families and rural communities.

In June 2001 the Saskatchewan Organic Directorate established the Organic Agriculture Protection Fund (SOD OAPF) to pay for and facilitate the legal action. All financial contributions and offers of help are welcome. See the website at www.saskorganic.com, email debbie.miller@saskorganic.com or phone (306) 476-2089 for details.

This class action suit is urgent, important and expensive! Our opponents have deep pockets, but we have many thousands of other friends and allies. We can only win with your help.

Introducing Ernie Paskaruk, our newest SEN Steering Committee member

I grew up in a small farming community north east of Prince Albert. While obtaining my B.Comm degree I worked three summers at the Prince Albert National Park. After graduating from the U. of S. I moved to Quebec, and then Ontario, where I worked in financial management for a large international corporation. I then bought a farm in Ontario and started a tax consulting business. While on the farm I planted over 20,000 trees and participated in a soil conservation program.

In 1998 I returned to Saskatchewan and bought a property in the forest near Christopher Lake. I am currently trying to finish our log house and maintain my tax consulting business. I joined the Forest Fringe Citizens' Coalition in 1999 and have spent two and a half years trying to convince SaskPower to be more environmentally friendly when building the new power line to LaRonge. Through this battle, I have realized that there are other environmental issues that need to be addressed, and that people are looking for a way to make a difference.

By being part of SEN I hope to help people in the community become aware that environmental issues are important, and that by working together we can make a difference.

Earth Day Envirothon

Sunday, April 21
12:00-4:00 p.m.
at the Saskatoon Zoo

How well do you know the environment and the wildlife? Test your knowledge by following our Zoo Clues. If you successfully complete the Earth Day Trail by following the clues, you can enter your name to win Earth Day T-shirts and posters. The Envirothon is free with regular Zoo Admission. Call 975-3042 for more information.

LOSS OF PROTECTION FOR THE GREAT SAND HILLS

1. The Setting:
The Great Sand Hills lie just south of the South Saskatchewan River and just east of the Alberta border, and they cover about 1,900 square kilometres (750 square miles) of high stabilized (vegetated) sand dunes and associated landscape features. Individual dunes rise to more than 15 metres (50 feet), second in Canada only to the Athabasca Sand Dunes farther north. Most of this landscape has been settled and utilized for ranching over the last hundred years, but the majority of land remains in provincial ownership.

2. An Innovative Protection Solution through Regional Planning:
People have long recognized the natural values of the Great Sand Hills, including them in the International Biological Program (IBP) in 1969, a provincial land use study in 1977, Parks Canada in 1985 (as one of five Natural Sites of Canadian Significance in Saskatchewan), the Provincial Parks System Plan of 1990 (as a candidate Natural Environment Park), and provincial identification in 1992 of five small areas as candidate Ecological Reserves.

The four Rural Municipalities of the area B Piapot (#110), Pittville (#169), Fox Valley (#171), and Clinworth (#230) — formed the Great Sand Hills Planning District and a joint Planning Commission under provisions of the Planning and Development Act in 1993. New bylaws mapped out three Zoning Districts: Agricultural Resource (AR), and two Environmentally Sensitive areas, (ES1) and (ES2). Complementary bylaws were passed by each of the four RM Councils in 1998. These bylaws remain in use today in each member municipality.

3. The Protection Results:
The Great Sand Hills Planning District Commission accomplished the following:

455 Sections of land are protected to ES1
(Environmentally Sensitive 1)

- equals 117,845 ha or 291,200 acres protected to equivalent of at least IUCN IV
- no new ranches, no farming, no oil and gas development
- largely contiguous lands in native vegetation

306 Sections of land protected to ES2
(Environmentally Sensitive 2)

- equals 79,254 ha, or 195,840 acres protected to equivalent of at least IUCN VI
- oil and gas development allowed with restrictions for environmental issues
- these ES2 lands buffer ES1 by surrounding about half of them

4. The R.M. of Piapot has withdrawn from the District Planning Commission, and Proposes to De-classify ES1 Lands:
The R.M. intends to re-zone all ES1 lands with current oil and gas permits to ES2, and all similar ES2 lands to AR (Agricultural Reserve B open to most land uses). This could ultimately affect approximately 100 Sections of land now designated ES2, and approximately 75 Sections now zoned ES1. Approximately 20% of the protected area of the Great Sand Hills could eventually be lost to oil and gas development, and lose status under the provincial Representative Areas Network (RAN).

LET MUNICIPAL AFFAIRS MINISTER HON. RON OSIKA AND YOUR MLA KNOW HOW YOU FEEL ABOUT THE PROTECTION OF THE GREAT SAND HILLS.

News from the Canadian Environmental Network

The CEN will hold its Annual General Meeting on May 23-26 in the Ottawa area. This meeting will be very important, as delegates will be voting on changes to the CEN's governance structure.

Last year Environment Canada contracted the Institute on Governance (IOG), a non-profit organization that specializes in governance and accountability issues for NGOs, to develop recommendations for improving how the CEN works.

The IOG researched the CEN by looking at its history, reviewing documents, and interviewing a broad cross-section of people active in the organization. In mid-February, 2002, the IOG released their recommendations. They address francophone and Aboriginal participation in the CEN, the stability and accountability of the National Steering Committee, and other related issues. Their report was immediately made available to all member organizations. If you have not yet seen it, please go to the CEN website at http: www.cen-rce.org for a down-loadable copy or contact the SEN office.

All SEN member groups are also members of CEN, and thus should become familiar with the IOG report, consider its implications, and discuss it internally in preparation for the CEN AGA. SEN will have two delegates at the AGA who will need to know the SEN groups' opinions in order to vote appropriately.

Sustainable Agriculture News

By Hart Haidn

The Canadian Centre for Sustainable Agriculture Inc. continues to work mostly behind the curtains to influence politicians, civil servants and academics. We made numerous presentations to individuals, committees and other groups. The message is always the same:

"A continuation of all major trends in agriculture will likely increase the problems in the farming sector, contribute to the further demise of rural communities, environmental degradation and ultimately, human health."

Unless these trends are broken and reversed, revitalization of rural areas will be difficult, if not impossible. Some of the trends, such as the rise in energy cost and hence the rise in input costs, and the concentrated economic power in the input as well as the marketing sectors, will force farmers to adopt new practices and to develop different farming systems.

International commitments:

In 1987, the UN World Commission on Environment and Development linked the issue of environmental protection to global environmental economic growth and development.

The Rio Earth Summit was the largest international meeting in history. During the meeting five documents were signed. Although Agenda 21, the fifth document signed at Rio, was not widely publicized in Canada, it was the main substantive work of the Earth Summit. Chapter 14 of Agenda 21 addresses problems of sustainable agriculture and rural development.

It is clear that Canada, or Saskatchewan for that matter, has fallen behind the other OECD countries in developing strategies and policies for sustainable agriculture. To some it seems surprising that even the U.S. is far ahead of us; in a comparison of states with provinces, the situation is worse.

A new publication:

In November we published *Exploring Sustainable Alternatives – An Introduction to Sustainable Agriculture.* This 350-page book contains selected presentations from our 1999 and 2000 conferences. Many libraries across the country have the book already. Although the official book launch will be on February 26 at the McNally Robinson bookstore in Saskatoon, it is available at the University Bookstores in Saskatoon and Regina, at McNally Robinson in Saskatoon and at the Book and Briar Patch in Regina. It can also be ordered directly from me at 306-956-0832 or at hhaidn@sasktel.net

The next conference:

We are presently putting together a conference on community development, which will take place at the Humboldt Uniplex on April 6 and 7. The title is: Community Development – Raising the Rural Voice.

The conference will look at Community Development in a broader context to include all four principles of sustainable development: inter-generational equity, economic viability, social stability and environmental soundness.

The presenters are expected to submit the key messages of their presentation before the conference to form the basis for the discussion. Each presentation will end with three recommendations for consideration in the community planning process.

At the same time it will be an opportunity for everybody interested in the betterment of rural communities to voice their opinion. The opinions expressed at the different stages of the conference will be recorded. The key findings of the presentations and the opinions will be presented to the Federal and Provincial Governments.

For more information on the conference or any other issues, contact me at 306-956-0832 or at hhaidn@sasktel.net

SES gets out of town

The Saskatchewan Environmental Society (SES) has just received a very welcome grant from Mountain Equipment Co-op to undertake a small rural environmental advocacy project.

The project was designed to respond to a need that had become apparent from the many phone calls SES receives. Calls come from people living in small towns or rural areas, who have a concern about a perceived environmental problem in their neighbourhood. It may relate, for example, to emissions from a small industrial site, to concern about oilfield waste disposal, to water management, or to ecological damage resulting from mineral exploration. People need information, someone to talk to about the problem, and advice about how to get it addressed.

Mountain Equipment Co-op's support has enabled SES to hire Colleen Rickard on a part-time basis for nine months to begin addressing some of these requests for help. Colleen is well known to the environmental movement as the half-time coordinator for the Canadian Parks and Wilderness Society's Saskatchewan branch, and is a warmly-welcomed addition to the SES team.

Initial project activities include visits to a controversial oilfield waste disposal site in the Big Muddy region and a meeting with residents in the Great Sand Hills who are concerned about potential loss of the zoning bylaws which protect environmentally sensitive areas from petroleum development.

Ness Creek -
be an early bird!

The 12th Annual Ness Creek Music Festival
(20km NE of Big River)
will be held
July 18 to 21, 2002,
featuring Kiran Ahluwalia, Ember Swift and many more TBA!
April 30 is your last day to buy Ness Creek Early Bird tickets.
Only **$45 for the weekend** — Children 12 and under are free, seniors free on Sunday, free rustic camping. NO PETS. NO GLASS.
Call Select a Seat for yours! 938-7800 or 1-800-970-7328 toll free in SK.
Also, remember that our **Open Stages at Lydia's** in Saskatoon are on the third Thursday of every month, ending in April. Watch for upcoming announcements for the next Open Stage in Regina.

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Saskatchewan Network of Watershed Stewards

In October of 2000, a working group was formed to coordinate and support a watershed stewardship program in Saskatchewan. This program, called the Saskatchewan Network of Watershed Stewards (SNOWS), is a partnership involving provincial, federal and non-government organizations. With SNOWS providing the first point-of-access, there will be less duplication of effort, a greater degree of cooperation and coordination among projects, and easier access to information. The vision of the network is "*People working together as watershed stewards for healthy aquatic ecosystems.*"

Representatives from the following agencies currently participate as members of the SNOWS Working Group: Saskatchewan Environment and Resource Management; SaskWater; Department of Fisheries and Oceans; Partners FOR the Saskatchewan River Basin; Provincial Association of Resort Communities of Saskatchewan; Prairie Farm Rehabilitation Association; Saskatchewan Wetland Conservation Corporation; Saskatchewan Association of Rural Municipalities; Environment Canada; and Ducks Unlimited Canada.

Network goals are to promote stewardship as a means to protect, restore and enhance aquatic ecosystems; foster better communication, coordination and cooperation among stewardship groups; and promote interaction and partnership among and between local groups, government, NGOs and the scientific community.

The Network will:

- assist new stewardship groups to get started in stewardship projects;
- facilitate cooperation and communication between groups;
- facilitate training to conduct watershed monitoring activities;
- encourage local people to take a proactive, collaborative approach to address watershed issues and concerns;
- serve as a province-wide coordination network for agencies and NGOs to share resources, capitalize on opportunities for collaboration, and avoid duplication of effort;
- encourage resource agencies to work together to provide complementary service and support for watershed stewardship projects and programs;
- provide help in accessing funds and tools to carry out stewardship projects;
- facilitate the collection, analysis, interpretation and storage of data;
- promote local watershed management projects;
- act as a clearinghouse for information; and
- promote public education and outreach.

The services of SNOWS will be available to anyone interested in watershed stewardship activities in Saskatchewan. Interested parties could range from individual citizens to established stewardship groups.

For more information contact Jo-Anne Richter or Heather Dawes at 306-477-9139 or 1-800-567-8007 or Magel Sutherland at 306-933-7943.

SNOWS and the Canadian Water Resources Association (CWRA)-Saskatchewan Branch are co-hosting a workshop Working Together for Healthy Watersheds on April 11 & 12, 2002 in Saskatoon. The workshop will develop an understanding about watersheds, roles that agencies, organizations, government, and property owners play in watershed stewardship, and how planning and working together can benefit everyone.

Voluntary Habitat Stewardship Conserves Grassland Habitat

By Robert Warnock and Margaret Skeel, Nature Saskatchewan

The OBO program, a voluntary stewardship program to conserve burrowing owl (prairie) habitat, has been running since 1987 and involves almost 500 landowners. We asked the question: "Does the OBO program conserve burrowing owl (prairie) habitat?" We found that, overall, it does.

Participation in OBO appears to affect landowners' decisions on whether to cultivate grassland areas. In our study we compared OBO and random sites of land that were grassland in 1986 and 1993. The study included the Regina and Weyburn map sheets, an intensive agricultural area.

What We Found

Our study found that OBO had a statistically significant effect in protecting grassland from cultivation. Grassland retention averaged 66% at OBO sites compared to 49% at random sites. When OBO members were broken down into those that continued (persistent OBO sites) or withdrew (archived OBO sites) after 5 years in the program, grassland retention was 80% at persistent OBO sites compared to 44% at archived sites. When grassland patch size and soil suitability for cultivation were considered, OBO had its greatest effect and has been very successful at protecting grassland patches most at risk, i.e. smaller patches (30 acres or less) on average to excellent agricultural soils. For OBO sites, conservation of Burrowing Owls and their nest sites, not patch size or agricultural soil suitability, may be an important consideration for grassland conservation.

Overall, grassland retention was significantly higher on poorer soils (67%) than sites with best agricultural soils (40%), and for larger sties (74%) than sites 30 acres or less in size (48%). In other words, smaller patches and patches with good soils appeared to be at greater risk of cultivation. A test of the relative importance of the variables showed that site type (persistent OBO, archived OBO, or random), patch size, and their interaction had the greatest effects on grassland retention followed by agricultural soil suitability. OBO had no significant effect on grassland retention on large sites (greater than 30 acres) or sites with poor agricultural soils. This is likely due to lower risk of cultivation at these sites.

Overall, loss of grassland sites increased to 6.0% per year in the study area during 1987-1993, from 3.2% per year during 1979-1986. Thus, the introduction of the OBO program in 1987 was an opportune time to initiate a stewardship program to slow the rate of loss at least on some lands. Without the presence of OBO on the landscape, loss of grassland sites would likely have been higher.

Evaluation Study Methods

We compared the 108 OBO sites signed up in 1987 and 1988 with 98 randomly selected non-OBO grassland sites. The random sites were selected from a list of 882 grassland sites surveyed by Dale Hjertaas and Wendy Lyon in 1986 in the same area. We excluded grassland sites on crown land. Selected sites were further classified by size (less than 5 acres, 5-30 acres and greater than 30 acres) and agricultural soil suitability (excellent, average and poor). By 1993, 41 of the 108 sampled OBO sites had been withdrawn (archived), usually due to cultivation of the land or change of ownership. The 1986 area of grassland (from OBO agreements and the Hjertaas-Lyon survey) was compared with grassland area calculated from digitized 1993 LANDSAT satellite imagery. Through site or phone visits, 96 of 140 sites with grassland 'loss' were verified and thus we developed a correction factor for satellite inaccuracies. This correction factor has increased the reliability of our results.

Nurturing Stewardship Interest

Member retention is the success of Operation Burrowing Owl. Of 675 landowners who joined in 1987-1994, 75% remained in the program for at least five years (even though 70% no longer had owls by the fifth year!), with less than 2% withdrawing after 5 years. Retention in the study area for at least 5 years was lower at 62%. However, of 157 OBO participants surveyed in 2000 and 2001, 85.4% were discouraged by the lack of owls and 19.9% indicated they were losing interest in the program. Increased support for landowners may be needed to maintain stewardship interest as the Burrowing Owl population continues to decline.

OBO works with landowners to make voluntary habitat stewardship work through:

1) Personal contact with participants;
2) Linkage to a flagship species, to garner interest in the grassland community as a whole;
3) An ecosystem approach that promotes an understanding of the interconnectivity of the living and non-living parts of our grassland community;
4) Providing relevant information;
5) Offering extension services, such as a pasture expansion program (financial aid to seed cultivated land) to improve habitat for burrowing owls.

We wish to thank participating OBO landowners and the many others that made this evaluation possible. Funding for this project was provided by Nature Saskatchewan, Canadian Council for Human Resources in the Environment Industry (CCHREI), Saskatchewan Environment & Resource Management's Fish and Wildlife Development Fund and Environment Canada's Habitat Stewardship Program for Species at Risk. Full details of the study are being published.

ECOLOGICAL EDUCATION?

"Certificate in what?!?" Shouted my mom on the phone, with the annoying delay only international calls seem able to create.

"In Ecological Education..." I repeated slowly fighting a bad international connection. I sighed heavily, as I faithfully awaited the next question, which I was not looking forward to tackling.

"And what is that?"

Now, a year later, after endless hours under beautiful mountain and prairie skies pondering the intrinsic value of rocks or the roots of people's disconnection to the Earth, now, maybe, I feel like dealing with my mom's question.

The certificate in ecological education program (CERTEE) is a one-year certificate program offered by the University of Saskatchewan. It focuses on developing one's abilities to "create, coordinate, and deliver integrated, high-quality ecological education and environmental education programs that emphasize human interdependency and connectedness to nature and the environment." It is a unique program, with a unique focus: ecological education. Not outdoor pursuits, not environmental education, but ecological education.

Hmm... you may think, and what is the difference?

The borders that define outdoor, environmental and ecological education are blurry and the concepts very intertwined. There is a distinction though, especially in the way in which these forms of education have developed.

Outdoor Education has historically been focused on the skills and activities you need outdoors. Environment education, on the other hand, has focused primarily on the environment or environmental problems, often as an extension of science and biology. Ecological education tries to combine the two and go beyond them. It is about holism and connection, educating outdoors and developing relationships (to others and nature), which is believed to foster more sustainable attitudes towards this planet. That was actually what attracted me to CERTEE.

I have worked as an interpreter and eco-tourism guide both in Brazil and Canada; taught wilderness survival to school children and adults; and I have been involved in conservation and restoration projects. I am a crazy 'nature' enthusiast and a proud tree-hugger. For a long time I had contemplated taking an outdoor leadership program or an environmental education course. I was not really sure what I wanted, but one quick look at some of CERTEE's literature and I was hooked.

The program emphasizes understanding human interdependency and connectedness to nature. It has significant roots in Indigenous traditions where ecological education has always been part of educational practices. The course work focuses on the philosophical foundations and practice of ecological education, as well as traditional ecological education.

Of course the idea of spending a whole summer in beautiful places across western Canada – northern Saskatchewan, P.A. National Park, Grasslands National Park, Cypress Hills, the Badlands, the Rockies – camping and learning survival skills, canoeing, mountain biking, horse-back riding, rock climbing, or spending ten days in a secluded log cabin by a northern lake snow shoeing, cross-country skiing and dog sledding — did nothing to hinder my enthusiasm.

"So you slept inside snow," my (tropical) mom asked one year later over yet another bad phone line.

"Yes, well, no ... inside a hollowed snow pile, it's called a quinzee," I patiently tried again.

"And, this is what you call school?"

"At its best..."

- Adriana Bacheschi was a participant in the 2001CERTEE program.

For more information about the program contact (306) 966-7680 or e-mail cert.ee@usask.ca or check the web site for great photos at http://www.usask.ca/education/edfdt/certee/index.htm.

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News from the Prairie Institute for Human Ecology

In keeping with our mandate of community shared learning, we held a number of workshops in 2001 ranging from pastured-poultry management to a hands-on natural plastering weekend.

Tyler Rendek (653-1366) has recently taken over the low-input greenhouse operation and offers kits or completed greenhouses. We continue to move forward on the sustainable communities forefront with a project being carried out with the RM and Town of Craik and by providing a supportive role (loan) to a group of three families that will be living this summer near Wynyard.

The Craik project will be located on land adjacent to the reservoir and Regional Park on the east side of the Regina highway opposite Craik. The project centers around a "sustainable" building that will demonstrate a variety of alternative technologies while housing a first-class restaurant and meeting rooms.

A small scale "ecovillage", comprised of 3-4 families/individuals living in energy efficient homes built with non-toxic local materials, will occupy an adjoining 100-acre site that has been donated by the RM. The families will aim to derive a major portion of their living from the land base in ways that are compatible with the long-term ecological integrity of the land. We will soon be looking for people interested in participating in this community.

Rick Morrell, founder of the successful green store *Eat Healthy Foods* in Regina, is once again on the move and has submitted a proposal for his family and two others to go into vegetable and fruit production at the New Roots community to help supply the store. The PIHE will help with interim financing to help cover start-up costs for this laudable endeavour, as we did with his food store a number of years back. Just think what we could accomplish in redirecting the economy if we had a major funding system for environmental projects like this!

Purchasing a land base near Shell Lake was a giant step forward this year. Arnold Mainland, one of the Institute's long-time supporters, envisions at least a portion of this land being used as a Learning Centre for the demonstration and sharing of skills that are appropriate and sustainable to this bioregion.

The first major event proposed to take place at this Centre is "Building Skills, Building Homes", a project aimed primarily at development of skills related to sustainable living for young aboriginal women. Tyler Rendek and his partner Diane Manegre have prepared a submission for funding this project that would be sponsored by QUINT (a not for profit development organization working in the core neighbourhoods of Saskatoon). Participants will spend a majority of their time living and working on the land at Shell Lake. They would be involved in building with straw bales as well as learning about such things as gardening, composting, preservation of food, water management and other ecological issues that are essential for developing self-sufficiency and a conserver lifestyle. The PIHE will actively partner with QUINT as well as several other organizations to deliver this exciting program.

A number of other summer workshops open to the general public are also being planned, including construction of yurts and geodesic domes, strawbale construction, earthen ovens, solar hot water systems, etc. The dates for most of these have not been finalized.

Please contact Lynn Oliphant (374-1068) after April 1 for dates (or see the next issue of Synergy magazine). Hope to see some of you at our workshops!

Green Campus Society update

The Green Campus Society is beginning to revamp itself. We hope to secure a permanent bulletin board space at the University of Regina so that notices/info/meetings can be posted on an ongoing basis without any problems. We continue to be involved with the Anti-GE struggle and are working with all allies to prepare for the International Bio-tech Symposium that is scheduled for Sept. 2002 in Saskatoon. Please feel free to network with us — and others — to prepare a "warm" welcome for these genetic polluters of the Earth.

The GCS also hopes to renew the Alternative Energy Working Group and give it new life. We are interested in doing a comprehensive detailed study of how Saskatchewan could become a Leader in Alternative Energies. We want to apply for grant money from North American Fund for Environmental Cooperation (NAFEC). The fund supports grassroots environmental work that complements the CEC's own program activities. This year, grants will be awarded to projects that are related to renewable energy, energy conservation or energy efficiency. Preference will be given to projects that build on energy-related initiatives to develop other components of a sustainable economy. Information on applying for funds is at http://www.cec.org, under the heading 'Grants for Environmental Cooperation' or contact the CEC at 514-350-4357; E-mail: NAFEC@ccemtl.org.

Last but not least, Green Campus Society will work to get together a larger student activist contingent on U of R campus and prepare for the Global Warming Future by offering Real Alternatives and Real Solutions.

That's it for now. People interested in these or other ideas, please feel free to contact us (the GCS) via my e-mail: vlau@accesscomm.ca

- By Victor Lau

Ecological-Engineering Experiment Results in Fish- Irradiation

By Maisie Shiell

At the Rabbit Lake uranium mine site in 1999, northern pike in Upper Link Lake were found to have very high Radium-226 concentrations. As well, Upper Link Lake has extremely high concentrations of radium in its sediment. Upper Link Lake flows into Lower Link Lake, through Rabbit Creek into Pow Bay on Wollaston Lake. Authorities do not appear to be concerned because the fish are unable to get through a dam to Wollaston Lake, and from observation, the fish appear to be quite healthy.

In 1974, Gulf Minerals Canada Ltd left waste rock piles at Rabbit Lake mine which leached Ra-226. This irradiated water flowed to Upper Link Lake from 1974 until 1997, irradiating the water and sediment in Upper Link Lake. In 1997, the authorities decided to re-route the contaminated water to the tailings pond.

However, in 1989, authorities had licensed an *"ecological engineering"* experiment. I believe it is this *"ecological engineering"* experiment that led to the high Ra-226 in Upper Link Lake's pike. *Boojum Research Ltd*, conducted the experiment. It transplanted 12 tonnes of algae to Upper Link Lake to mop up the Ra-226. The algae did mop up considerable amounts of Ra-226 from the water, but it vastly increased the radium in the sediment.

The water in Upper Link Lake "*was assumed to have had a poor nutrient status."* However, during the experiment (from 1989 through 1993), Upper Link Lake was actually found to have *"a highly productive ecosystem ... creating a nutrient-rich sediment" (*apparently from nitrate from the mining, and phosphate naturally). The algae grew 13 times more rapidly than it had in Lower Link Lake. There are now areas in the lake with as high as 40 Bq/gram Ra-226 in the sediment.

According to the Boojum 1993 study, the extremely fast algae growth is likely to continue for three decades. Thus, I fear that this problem may worsen, even though the source of contamination has finally been re-routed.

Upper Link Lake is a fairly shallow lake with a *sedimentation dam* at its outlet that prevents fish getting into Wollaston Lake. Pow Bay sediment does not appear to be affected by radium build-up so far. In recent years, winter *fish kill* caused by a lack of oxygen has become more pronounced, possibly due to excess organic material in the sediment taking up the oxygen. In my opinion, a dead fish is preferable to a fish living with genetic or somatic deficiencies which would likely be passed on through future generations.

The CNSC (Canadian Nuclear Safety Commission) says it will continue to monitor Lower Link Lake. No further monitoring of fish in Upper Link Lake is planned. Dredging the sediment must wait until the Rabbit Lake mine site is *decommissioned,* in several years. Cameco proposes to custom mill part of its high-grade Cigar Lake ore at the Rabbit Lake mill. If this is allowed, it will probably mean another 15 to 20 years before decommissioning the Rabbit Lake complex will be considered.

In 1974, the long-term problems of alpha-emitting radionuclides from uranium mining were less well understood than they are today. For the last 50 years radon gas has been recognized (an alpha-emitter that decays into three more alpha-emitters) as a major cause of human cancer. However, not until the 1990s has any official recognition been given to the fact that alpha-irradiation may also cause long-term harm to the ecological environment.

A July 2001 Environment Canada study in support of adding radionuclides to the *"Priority Substance List"* of toxic matter to the *Canadian Environmental Protection Act* (CEPA) advocates that the Relative Biological Effectiveness (RBE) value for alpha-irradiation needs to be at least 40 times greater than the biological effectiveness of gamma- or beta-irradiation. Currently, CNSC uses a 20 RBE value. Industry does not appear to agree with the results of this comprehensive study. I have trouble believing that what is being licensed at the Saskatchewan high-grade uranium mines is in synch with the advice being given in the July 2001 study. This is of particular concern to those of us who would like to leave a tolerably friendly environment to our children in future centuries. *For references, please contact the author at < ploughshares@sk.sympatico.ca >*

Seedy Saturday

March 16, 1 to 5 PM
St John's Anglican
Cathedral Hall
816 Spadina Cres.
Saskatoon

Free will offering at the door

Seedy Saturday is an annual spring time celebration of community, biodiversity, gardening and sharing. If you are a gardener, check out the Seed Exchange table. Bring your seeds to swap. You can also purchase heritage and native variety seeds from local seed growers and others. There will be an Eco Gardening Fair with book tables, and displays by community groups.

Guest speakers and workshops are also scheduled. At 1:15, Dalene Callaway will conduct a workshop on starting seeds indoors. At 2:15, Sara Williams will talk about drought tolerant gardening. Karen Archibald will tell about building a Food Security Coalition at 3:30. And at 4:15, come and listen to Marc Loiselle speak about organic farmers' response to genetic engineering.

For more information contact CHEP at 655-5379 or email jodi@chep.org or see www.chep.org.

Forest Fringe Citizens' Coalition Struggle with SaskPower

Members of the Forest Fringe Citizens' Coalition, a coalition of area residents, wood lot operators and local farmers, have been fighting to save a unique pocket of transition boreal forest, just south of, and continuous with Prince Albert National Park.

In July 1999, SaskPower announced a plan to upgrade an existing 72-kVolt line that runs 240 km from Prince Albert to LaRonge. SaskPower proposed to create a new and very destructive corridor, 70 to 80 m (230+ feet) wide through the forest, ignoring the advice of area residents that the line should go over low-sensitivity, already opened lands, several kilometres to the east. This route would also be at least 500 m from any homes.

And so the struggle began. In August 1999, more than 100 families and individuals formed the Forest Fringe Citizens' Coalition (FFCC). We set our goals and principles, which urged a low-impact route that would respect forest, homes and people, avoiding forest lands as much as possible and instead using lands already altered by agricultural practices.

Over the past two years, SaskPower did everything that large corporations can do to crush opposition. The company divided the project into two parts. The northern portion, running exclusively through public forest lands, received Government approval and is already completed. The southern portion, through private lands, was to receive further study by ERIN Consulting, and then by the Transmission Line Routing Review Panel, an advisory agency to SaskPower.

SaskPower held "Open House" sessions at which they advised landowners of their plans. These sessions included a lot of engineering detail and other technical information-overload. The Review Panel declared that these "Open House" sessions were designed by SaskPower to assess the degree of opposition to their plans, rather than to facilitate any kind of two-way communication. SaskPower officials made comments to landowners along one route proposal that seemed to pit one resident against someone living along another route. SaskPower used expressions and provided information in a manner that often hid the true impact of their statements.

The ERIN Consulting report declared that the forest routes were the most sensitive to damage by a power line corridor. SaskPower's proposed corridors crossed the largest mature conifer forest area in the Boreal Upland Forest in this region. This forest is the region with 12 different rare and endangered species sightings. The report indicated that line routing through this general area could minimize damage only by avoiding the areas of continuous forest.

Based on this assessment, members of the FFCC felt an acceptable route could be selected. However, in June 2001, SaskPower announced that two of three options they were looking at ploughed directly through the most sensitive forest lands in the region. In August, SaskPower announced its route. It goes completely through the forest, affects the most private property, comes closer to more homes and does the most environmental damage!

SaskPower apparently had no intention of ever listening to anyone who opposed their original intentions of building the line on the highest ground (near the highway) and in as direct a manner as possible, regardless of the impact on the area and on people.

The Citizens' Coalition held public meetings, conducted letter-writing and email campaigns, used a website < **www.friendlyforest.ca** >, visited the Legislature, gathered over 1000 signatures on a petition, and faxed and phoned the people involved in decision-making. A "Forest of Protest – Adopt-a-Tree" campaign was started in late August 2001, and by the end of January 2002 had nearly 1900 trees adopted on private property through which SaskPower is planning to build its line. We got media coverage, and received advice from David Suzuki, among others. The Coalition toured politicians through the area so they could see first-hand what is at stake, and met with SERM in person. The provincial government and SaskPower have chosen to ignore these protests.

SERM has given fast-track approval to SaskPower, subject to 23 mitigating conditions. These conditions, required to bring the environmental damage "to a tolerable level", have fully validated the concerns raised by the Forest Fringe Citizens' Coalition over these past two years. In mid-February 2002, SaskPower began its destruction of the forest. Only a successful court challenge by some "third party' might force a full environmental impact study to be conducted.

The members of the Forest Fringe Citizens' Coalition and all other citizens who have supported this effort, trusted in elected government to protect people and our environment from the unnecessary and wanton destruction of forest by SaskPower planners. This trust has been betrayed.

The members of the Forest Fringe Citizens' Coalition, while not successful in stopping this project, have raised awareness of vital issues of environment and governance that may yet lead to future gains. All persons who have been part of this effort are winners, and the members of the Coalition wish to thank them for their generous support of this cause.

- By Gerald Regnitter and Ernie Paskaruk

SOS Elms Coalition:
Ten Years of Fighting Dutch Elm Disease

SOS Elms will be 10 years old this spring - a cause to celebrate! A coalition of citizens, we have successfully faced the challenge of fighting Dutch Elm Disease (DED) and keeping the American Elm alive and well in the communities of Saskatchewan. It's an important fight - American Elms provide long-term beauty and ambiance, as well as significant environmental and economic benefits to our older neighborhoods. We are grateful to our loyal membership and our sponsors for their appreciation of these trees and for their ongoing support for our work in public education, lobbying efforts, and community tree inventories.

A Homeowner's Guide to Elm Care and DED Prevention, financed by Saskatchewan Environment and Resource Management and The Saskatoon Foundation, is our most recent major project. This Guide is an attractive six-page colour brochure. It was the culmination of our advertising campaign, "Act now or your elm is as good as DEAD!" which ran in the Saskatoon Sun in late summer 2000. Last year we distributed 13,000 copies of the Guide directly to homeowners in the older neighborhoods of Saskatoon. Guides have been made available in libraries and leisure centres throughout the city, as well as at trade shows and by the Saskatchewan DED Association. Up until now there has been no printed publication like this. It is extremely useful for homeowners with questions about their elms and how to care for them.

Due to the interest for a more generic version of the Guide from DED practitioners, we revised the Guide for communities outside of Saskatoon. In 2001 and 2002 we distributed over 12,000 of these revised Guides to Saskatchewan communities where DED is a current problem or impending threat. Both the Saskatoon and provincial guides are still available - please contact SOS Elms (see below) if you would like a copy.

SOS Elms has always played an active role in the community to raise awareness of DED. The City of Saskatoon has developed an Emergency Response Plan to DED for implementation when the disease has been confirmed here. It has come as close as Davidson, in 1999, but has not yet been detected in Saskatoon. Our local goal is to ensure that the City carries out its contingency plan efficiently and effectively.

This winter, in conjunction with the Saskatchewan DED Association, SOS Elms addressed City Council about "getting serious" in its efforts to prepare for the arrival of DED. Our greatest concern relates to privately owned elms. Where will the money come from to properly prune or remove these trees in order to prevent the spread of this infectious disease? SOS Elms Coalition hopes to meet with community associations this year to inform them about the threat of DED and what they and their residents can do to care for their trees.

We in Saskatoon and Saskatchewan need to demand the support of our province, as well as our municipalities, in the battle to save our elm trees. Please get involved with your community and do your part. Join SOS Elms! Our membership is only $10 per year, tax deductible! To join, and/or to get more information on SOS Elms, DED, and what we have been doing, leave a message on our phone line at **343-7497**, write to us at **SOS Elms Coalition, P.O. Box 1313, Saskatoon SK, S7K 3N9**, or check out our **web site** at **www.soselms.org**

- By Stephanie Laverty and Richard Kerbes

Wonders of Wildlife

By Joe Milligan

In June 2001 the Saskatchewan Wildlife Federation (SWF) released the *Wonders of Wildlife: A Leader's Activity Guide for Teaching Young Conservationists.*

The manual was written to motivate SWF branches to form youth groups and provide the volunteer leaders with some exciting outdoor activities. It encourages leaders to use their own strengths and contacts, keeping in mind the interests of the kids, to make a youth program active, alive and interesting.

The *Wonders of Wildlife* is divided into six sections: Fishing and Aquatics, Hunting and Trapping, Conservation, Wildlife and Outdoor Appreciation, Outdoor Skills and Winter Activities. Each section is further broken down into three levels: Junior (ages 7 – 9), Intermediate (ages 10 – 12) and Senior (ages 13 – 15+).

All of the activities can be adapted to suit the setting and age level. Activities include: 'Creative Cordage' to teach kids how to make cordage from natural fibres like stinging nettle and dogbane; 'Star Stories' shows a leader how to tell the stories in the stars, even on a cloudy night; and 'Tricky Tracks' that helps kids of all ages recognize animal track patterns in a fun and creative way.

Presently the manual contains over 50 activities plus an extensive Appendix. More activities are planned for the future.

Since *Wonders of Wildlife* was released, two weekend workshops have provided the SWF volunteers with a hands-on overview of the manual and opportunities to try a number of the activities. The volunteers were also presented with a variety of other activities, skills, and tips-&-tricks for working with youth, not mentioned in the manual. These included: playing 'snow snakes', night hikes, throwing atlatls, nature walks, constructing survival stoves out of pop cans fueled by gas line antifreeze, and a variety of indoor and outdoor initiative tasks.

If you are interested in *Wonders of Wildlife* please contact Joe Milligan at 1-306-692-8812 or via e-mail jmilligan@swf.sk.ca

Hogging the Water Supply

By Cathy Holtslander

Under Saskatchewan's rules for licensing industrial hog barns, Sask Ag and Food is able to give a permit for barn construction without having assurance of an adequate local water supply. SaskWater can advise the agriculture officials, but has no power to stop a barn from going ahead if it has a concern about potential for water problems.

Recently some barns were given approval in the Porcupine Plain area, in spite of drought so severe that local people have been desperate to find water for their cattle, and the RM of Bjorkdale has declared a drought emergency.

This fall Big Sky Farms applied to dig a well for the barn that it is planning to build near Porcupine Plain (Sask Ag and Food has already approved construction). Historically, it has been very difficult to find ground water in the area. I read the hydrogeological report that the company submitted to SaskWater in its application for the well and I found the following weaknesses:

1. Only one borehole and an adjacent observation well were drilled into the formation.

The report states that the aquifer extends less than 700 m northward, and the south, east and west extent of the formation are unknown. In other words, there is no data to indicate the size or extent of this aquifer, and consequently no information upon which to base a conclusion about the amount of water available from this aquifer.

2. Pump test data from one borehole for one 22-hour period was used to estimate the volume of water available for a ten-year period.

This would seem to be too small of a data set on which to make such a prediction; particularly when there is so little hydrogeological information available from the surrounding area.

3. The recharge rate of this well has not been measured, or taken into account in this report.

The water bearing formation is an ancient pre-glacial deposit that is not contiguous with the major underground aquifer system known as the Empress Group. It may well be quite small. If so, recharge rate will be an important factor in assessing whether the proposed pumping rate will be sustainable. If the glacial till above the aquifer is of low permeability the recharge rate could well be very slow; resulting in a significantly lower yield than might be expected based on the results of a single pump test.

Even if the well produces as much as the tests claim it will, it would still only provide about 60 percent of the 45 million-gallon-per-year of water required by this type of ILO. Instead of sharing the water, it is likely that Big Sky will have to find additional sources in the area, further stressing the local water shortage situation.

It seems like there is a major gap in the logic that would allow construction of a 5,000-sow hog barn under these circumstances.

Join the Network!

New members are welcome. Membership is open to non-governmental, not-for-profit organizations involved in environmental protection activities. Individuals who support the Network's objectives may also join as subscribers but may not vote or hold office.

Name/Contact Person .....
Organization .....
Title .....
Address .....
Postal Code .....
Phone ..... Fax .....
Email .....

Membership fees:

Annual budget of less than $5,000	$30.00
Annual budget from $5,000 to $29,999	$35.00
Annual budget from $30,000 to $99,999	$45.00
Annual budget of $100,000 or more	$50.00
Organization fees include $10.00 membership in the CEN	
Individual subscriber	$10.00

Please send your cheque to Saskatchewan Eco-Network, #203-115 2nd Ave. North, Saskatoon, SK. S7K 2B1.

New improved SEN website!

SEN is renovating its website. The new website will have the same address (www.econet.sk.ca), but will be more user-friendly and current, with new information being posted regularly, and an added "upcoming events" bulletin board. The website will also provide a gateway to related websites and downloadable documents.

We hope the improved website will raise the profile of Saskatchewan's environmental issues and improve access to information. SEN member groups and others will be able to use it as an outreach tool. Journalists, academics, and policy makers will be able to look up background information relevant to their work. And it will provide a communications point for citizens in rural and remote communities.

The project is being done in two phases. Presently, John Yates is creating a new site-map, visual design features and page templates. Once the redesigned site is finalized, it will be up on the web for everyone to begin using. The second part of the project entails on-going research, writing and maintenance of the site.

We invite you to send in suggestions for content, links and other improvements. Or if you're really keen on the site, why not join the SEN Website Committee (call Cathy for details). We would also encourage you to link it to your own website.