

# REAPS REPORT

RECYCLING AND ENVIRONMENTAL ACTION PLANNING SOCIETY

Hotline 250-561-7327 Box 444, Prince George, BC V2L 4S6 www.reaps.org January 2004

## R.E.A.P.S and RDFFG to sign three year deal

R.E.A.P.S and RDFFG have been partnering since 1995 educating the residents of the Regional District of Fraser-Fort George on solid waste and recycling initiatives.

For the previous 8 years R.E.A.P.S has been operating on a yearly contract with the RDFFG. R.E.A.P.S President James Spankie is pleased to announce that at the December 2003 RDFFG Board meeting the Board approved a resolution authorizing staff to negotiate the terms of a three-year contract for services with REAPS to operate the compost demonstration garden, provide waste reduction/education services and deliver home composting support.

This means that, once this contract is in place, R.E.A.P.S will be ensured of operational funds to continue its community based environmental programs for three more years. This allows us to do long term planning and programming which will benefit the communities in the Regional District.

Come out to the AGM on January 22<sup>nd</sup> (see coming events) to help us celebrate, and join in the planning of exciting new programs. With funding secure, our new board will be able to concentrate on developing new programs and expanding our existing initiatives.

This is a landmark achievement for R.E.A.P.S and we would like to thank the Regional District for their confidence in our program deliver and

their continued support. Thanks also need to go to all of the R.E.A.P.S board members, volunteers, community supporters, and most of all to R.E.A.P.S Environmental Educator, Terri McClymont who has been the backbone of the award winning Compost Demonstration Garden and outreach programs.

### CONTENTS

#### R.E.A.P.S NEWS

REAPS Annual Recycle Toy Drive.....	p.2
REAPS AGM.....	p.2

#### LOCAL NEWS

Pet Peeve.....	p.2
Seedy Saturday.....	p.2

#### NEWS FROM THE REST OF THE WORLD

Community Greenhouse.....	p.3
New Technology turns food waste.....	p.3
Japan - Kamikatsu Twp. Eyes Zero Waste....	p.3
Organic Market Interest.....	p.4
New Theory on Invasive Plant Emerges.....	p.4

#### INFORMED CHOICES

Tapping into a Unique Fuel Source(part II)p.5	
Winter Composting.....	p.6
Noxious Weeds.....	p.6

#### BACK PAGE

Coming Events.....	p.8
Recycle Craft.....	p.8
Membership Application.....	p.8
About the Newsletter.....	p.8

# R.E.A.P.S NEWS

## R.E.A.P.S Annual General Meeting

### R.E.A.P.S Annual Recycle Toy Drive

Twenty-eight large garbage bags of toys were collected at our Annual Recycle Toy Drive. These toys were distributed to nine (9) local childrens' groups who were very appreciative of the contributions.



One suggested for next year was that another venue be sought to avoid the hinderance of the stairs. The Northern Interior Health Unit will be our location of choice next year.

Special thank you to Marilyn Anderson for her assistance during the drive.

Our AGM will be held on January 22, 2004 at the Prince George Public Library in the Keith Gordon Room at 6:30 p.m. The meeting will begin with Year-end report, a refreshment break, and voting in of the new executive. Glenda Waddell, Manager of Environment from Canfor, who will be talking about BC Hydro and Canfor's Cogeneration Project, will follow this.

Show your support and come and join us. If you are interested in becoming an executive please check out position descriptions at [www.reaps.org](http://www.reaps.org) under "membership", board positions. A commitment of 3 hours a month and lots of ideas is all you need to bring.

## LOCAL NEWS

### Pet Peeve

My Sony cordless phone is going in the garbage, because I can't get a replacement battery pack for it. At Staples, where it was purchased, they don't carry that type of battery anymore. At Radio Shack, the sales associate takes one look at the battery pack dangling from my hand and says "uh-oh....". At the upscale Sony store, I am informed that "Sony doesn't make phones anymore". The 1-800 number I am given for Sony is - well, we all know what happens when you call a 1-800 "customer service" line.



My first thought was that this is a splendid case of planned obsolescence, but it's worse than that. It's the result of a total

lack of planning. Why don't battery packs come in standard sizes and configurations the way regular batteries do? And why don't companies have a responsibility towards products they have manufactured?

Barb Rayment

### Seedy Saturday on February 28, 2004 at Art Space (above Books n' Co)

Prince George's Seedy Saturday event is an opportunity for gardeners, farmers and seed savers from our region to celebrate the growing, saving and sharing of open pollinated and heritage seeds. It is a chance for us to get to know each other, to learn why and how different members of our community save seeds, and to tell the stories behind seeds that have been saved in our families. Experts from our own community will be attending and presenting during the day.

Through projects like the Seedy Saturday event, we hope we can increase awareness and appreciation for our seed heritage and in turn, increase participation in seed conservation programs. It is an exciting beginning to protecting the past and securing a better food

system for the future. We hope you will join us!

The day will include three main components:  
Seed Swap and Sale, showcase of horticultural related displays and presentations.

## NEWS FROM THE REST OF THE WORLD



- to distribute the GOMIXER. The GOMIXER uses water and heat to biodegrade food industry leftovers in four days. The only output of the system is nutrient-rich water that can be discarded or diluted and used on lawns and flowerbeds. "The system is designed for restaurants, hospitals, hotels, and other large facilities. By enabling these facilities to process food waste on site, the GOMIXER reduces or eliminates landfill use, fees and transportation costs", said Ray Rawlins, vice president of marketing for Advanced Biotechnology Inc.

"This environmentally friendly system has been used successfully in Japan for 10 years, and trial demonstrations of the GOMIXER are now underway at the Fairmont Banff Springs and Fairmont Chateau Lake Louise", Rawlins adds.

- From Landscape Trades magazine, May 2003, Volume 25, No. 4, p. 37.

### New technology turns food waste to fertilizer in four days:

Two Japanese companies partnered with Airdrie, Alberta based Double T Equipment Manufacturing Ltd. to market and distribute an organic waste disposal system.

*Editor's note: We contacted David Huggill, Environmental Systems Manager of Fairmont Chateau Lake Louise, who brought us up to date. He says: "We did 'test-drive' the unit and it certainly has some potential. Given our current circumstances in regards to capital expenditures and solid waste management we will not be purchasing a Geomixer. It is an alternative that we will certainly keep in mind as we move forward in the future, however."*

### Japan - Kamikatsu Township Eyes Zero Waste - No Incineration or Landfill by 2020

Eski Machine Co. Ltd, of Japan, ARC Corporation of Japan, and Double T Equipment Manufacturing Ltd. formed a joint venture company - Advanced Biotechnology Inc.



The town council of Kamikatsu, located in Tokushima Prefecture in Japan's southwestern island of Shikoku, adopted the "Kamikatsu Township Zero Waste Declaration" on September 19, 2003.

*Japan for sustainability (JfS)* reports that the declaration states that the town has resolved to achieve zero waste by 2020 in order to bequeath clean air, palatable water, and fertile land to future generations through:

- \* Educating people not to pollute the earth
- \* Promoting waste reuse and recycling, and eliminating incineration and landfill by 2020
- \* Building a worldwide network for a better environment.

Meanwhile, the "Kamikatsu Township Zero Waste Action Declaration" states that the town will strive to eliminate the need for waste incinerators and landfills by 2020, in view of their understanding that landfills and incinerators, including gasification furnaces and RDF (refuse-derived fuel) power plants, can cause health hazards, resource depletion, environmental damage, and financial difficulties.

The concept of Zero Waste, noted JfS, originated in Canberra, Australia, in 1996, and has been adopted by many municipalities in Australia, New Zealand, the United States, and other countries.

In Japan, Kamikatsu has become the first municipality to adopt a Zero Waste Declaration.

**THIS INFORMATION COMES TO YOU FROM THE RESOURCE RECOVERY FORUM**  
**Resource Recovery Forum**, 1st Floor, The British School, Otley Street. Skipton, North Yorkshire BD23 1EP. UK  
**Secretary: Kit Strange**

Tel: 01756 709 808  
Fax: 01756 709 801  
Email: rrf@residua.com www.residua.com

## Organic Market Interest Needs Greater Cultivation

Organic produce is showing up in more of Canada's mainstream supermarkets these days, but according to a new report from Statistics Canada, organic production still

represents just a tiny fraction of Canada's total agriculture

industry. And it says organic fruit and vegetable production hasn't been expanding as quickly as most people might think.



This new report from Stats Can, says Marshall Perrin of Agriculture and Agri-Food Canada, is based on grower surveys conducted over the past two years. Among the findings:

- Of the total area planted to vegetable crops in Canada, just over one-half of one percent is organic.
- When it comes to fruit, the proportion is higher, but it's still under one percent of area planted.

The report says that the organic market is still not well defined in Canada, which makes it more challenging for organic producers to sell their products at a premium. It also points to the ongoing challenge of pest control to protect yields and product quality.

The report says organic production does seem to make economic sense for a number of fruit and vegetable crops, and it says main-stream supermarkets are devoting more space to organic produce, which might bode well for the future. The full report is on the main web

site of Stats Can at  
www.statcan.ca.

Information from: Greenhouse Canada  
Magazine, Dec. 2002.

## **New Theory on Invasive Plants Emerges**

Researchers at Colorado State University (CSU), Fort Collins, report that some non-native invasive weeds may prove to be aggressive in a literal sense. In their study on spotted knapweed (*Centaurea maculosa*), the scientists discovered that this weed triggers the plants around it to destroy themselves.

The chemical catechin is a natural herbicide released by the roots of spotted knapweed. "Catechin causes plants to self-destruct", explained Jorge Vivanco, professor at CSU's



Department of Horticulture and Landscape Architecture. "It actually triggers a genetic response within the plant, causing the plant to create oxidants - free radicals - inside the plant, as well as triggering genes that cause the plant's cells to die."

Researchers have identified genes within spotted knapweed that make it resistant to the catechin, thereby allowing it to thrive in the soil where it has released the chemical.

In the past, it has been assumed that invasive weeds succeeded because they out-competed the native plants in a habitat. It turns out that they may actually be giving themselves an extra edge through chemical warfare - and doing it organically!

Information taken from an article  
in *American Nurseryman*, Dec. 1,  
2003.

## **INFORMED CHOICES**

### **Tapping into a unique fuel source Part II**

### **Praising a win/win situation: "Creative energy solution strategy"**

[ - more on the CanAgro/Maxim Power Corp./B.C. Hydro strategic partnership described in the previous issue of R.E.A.P.S. Report.]

by Rachel Goldsworthy

Reproduced (condensed) with permission from the Sept.  
2003 issue of *Greenhouse Canada*.

The [cogeneration] project was announced earlier this year by Maxim Power Corp., which described it as a unique opportunity to realize a world-class sustainable waste-to-energy system in British Columbia using state-of-the-art efficient cogeneration technology. The project will

also slash greenhouse gas emissions by an estimated 30,000 tonnes per year, which is equivalent to permanently eliminating 6,000 cars from Lower Mainland British Columbia streets.

Finning International Inc., Maxim's strategic partner in Distributed Power, will play a major role in the project. Maxim contracted with Finning to design and build the cogeneration powerhouse to convert the landfill's methane gas into electricity and heat. Finning will supply the facility with detailed design, engineering and construction services.

The gas will be delivered to Maxim's pipeline and then will be transported to the cogeneration plant at the CanAgro greenhouse site where it will fuel the state-of-the-art cogeneration system. The cogeneration plant is designed to produce 5.55 MW of electricity per hour (enough to power between 5,000 and 6,000 homes in B.C.) And about 600 gigajoules per day of useable heat (enough to heat over 2,000 homes annually in the Lower Mainland). The electricity will be sold to B.C. Hydro under a 20-year green

energy agreement, while the useable heat from the cogeneration system will be delivered to the CanAgro greenhouse during its heating season to support its tomato growing operations.

Rick Hopp, senior vice-president of business development for Maxim ([www.maximpowercorp.com](http://www.maximpowercorp.com)), said: "This project is a perfect example of Maxim's creative energy solution strategy. We will utilize a waste source of carbon close to our customer and turn it into viable energy in the form of heat and power. The project is clearly a win-win solution for the Corporation of Delta, the City of Vancouver, CanAgro, our strategic partner Finning, and Maxim shareholders."

Finning Power Systems ([www.finning.com](http://www.finning.com)) president Jack Carthy was equally enthused, noting that, "although we've been involved with a number of projects like this through our operations in the United

Kingdom; this project is a breakthrough for western Canada. Through our strategic alliance relationship with Maxim, we anticipate many more creative energy opportunities both here and worldwide."

*[Editor's note - this project is similar in nature to one of the possibilities being explored by Regional District of Fraser-Fort George for utilizing the methane gas that will be available once the Foothills Landfill is capped.]*

### **Donate Your Refundables to R.E.A.P.S**

An account has been set up at both the Nechako Bottle Depot (1<sup>st</sup> Avenue) and the BBK Bottle Depot (Cowart Rd) to receive the monies from the return of beverage containers.

Just say "for the REAPS Account".

Thank you for your support.

### **Winter Composting**

Winter is the best (or at least the easiest) time to compost!! What do I mean? Well, to successfully compost we need to provide food, in the form of sources of carbon and nitrogen, water and oxygen. This turns our kitchen and yard wastes into 'black gold', also known as 'free fertilizer and soil amendment'. During the warmer months of the year we continually feed our composter, ensure that it is moist like a wrung-out sponge, and turn the pile at least once a week.



In the winter, from November to April, we can continue to feed our kitchen wastes to our composter, but

we don't have to do the work. There is no turning or adding water or ensuring the food materials are covered with a non-food layer. (The composters are still working though, down to temperatures of -13C. 'Psychrophiles' are the cool temperature bacteria that continue to work, although more slowly, during the fall and winter. A deep layer of straw over the compost pile will insulate it, and keep it working longer.)

During the inactive colder periods, the freezing and thawing action in the composter help to break up the food materials and prepare an abundance of moist, nitrogen-rich raw materials for spring, when the bacteria become more active and the composter once again begins to heat up. As the weather warms in the spring, we go back to turning the compost regularly, covering the layers of food waste with a non-food material, and making sure that the pile is moist.



So, there's no excuse to stop composting: you can continue to divert your kitchen wastes from the landfill and help prevent the production of methane gas, an ozone depleting gas. Whether you make that cold trek out to your compost pile or fill buckets (with lids) to be emptied in the spring, all that valuable wanna-be compost won't be wasted. Biodegradable composting bags will soon be available in Prince George, making it even easier to stash kitchen waste over the winter.

Whatever the weather dumps on us for the next four months, we can still do our part to help the environment, and reap the gardeners' black gold for our plants.

For more information call R.E.A.P.S at 561-7327.

## Noxious Weeds

Answers from BCMAFF and BCMOF to questions received by R.E.A.P.S staff about the weed display at the Compost Demo. Garden this past summer. This display was designed to inform and educate the public about noxious weeds.

### 1/ Why should we be concerned?

Since many of these weeds out-compete native species, they take over the landscape by crowding them out. This leads to a reduction in bio-diversity and the extinction of some native plant species. Loss of plant biodiversity can also lead to changes in animal biodiversity as plants that provide food or shelter disappear.

### 2/ Agricultural uses (i.e. / farming) removes the original plant cover and changes the ecosystem which also contributes to the invasion of these weeds. Doesn't this have more impact than a few weeds on a city lot?

Humans moving into any environment change the ecosystem. Farmers live on and nurture their land, including using management tools such as shelterbelts (which provide habitat) and crop rotation, which keeps weeds down. If we want to eat, we should support the farmers in their efforts to maintain balanced and healthy ecosystems on their farms.

### 3/ If I see a weed in the wild should I bring it home and burn it?

Yes, If the weed is a highly invasive species like knapweed, field scabious, burdock or marsh thistle destroying small, isolated patches is very effective. Remember that if you are transporting weeds close to or in seed make sure they are in a sealed container of some sort. When burning, do not breathe the smoke as it potentially can be a problem with some toxic plants. It is important to report highly invasive weeds so that they

can be included in an overall area control strategy.

**4/ How do I get rid of the weeds?**

It depends on the species. Pulling is most effective on small isolated patches. Check the Detailed Information Sheets (see #9) for control of larger patches.

**5/ Why are they considered invasive?**

Some weeds are invasive because they simply crowd out the native species. Others are not palatable to livestock and wild animals, leading to overgrazing and extinction of edible native species. Some release chemicals toxic to native plants, into the soil. Many of these alien plants were introduced to our environment without the natural predators, parasites and other controls that keep them in check in their native habitats (usually Europe/Asia.)

**6/ How do I control the daisies?**

Refer to Detailed Information sheets. (See #9)

**7/ Daisies - I have them everywhere and encourage them. They are a beautiful plant and add color to my garden.**

As long as you keep them from escaping off your property no one is going to tell you that you can't have them. There are many beautiful and hardy plants that don't pose a threat to native plants which you could replace the daisies with.

**8/ Who do I call if I see these weeds to get rid of them?**

It depends on the weed. If you seed Knapweed, Field Scabious or Marsh Thistle, call Denise McLean at MAFF; 565-7200.

**9/ Is there a pamphlet / guide to noxious weeds for identification?**

Weed identification booklets are available from BCMAFF and Ministry of Forests. Other excellent sources of information are "Weeds of Canada", "Plants of Northern British Columbia" and many places on the internet. The Detailed Information Sheets are taken

from the BCMAFF website  
<http://www.agf.gov.bc.ca/cropprot/weeds.htm> and the Weeds BC website  
<http://www.weedsbc.ca/>.

**10/ How are they introduced?**

Many were introduced as ornamental flowers, some came in mixed with hay or wildflower seed mixes, and some have traveled on the highway or railway on vehicles. Weeds tend to be good at hitching rides, which is why they are such effective weeds!

**11/ I heard there was a program that employed people to locate noxious weeds and inform homeowners to get rid of them. Is it still happening?**

Up until a few years ago the Regional District of Fraser-Fort George was taking advantage of a grant supplied by the Ministry of Agriculture to run a program. However the Regional District has since cancelled it. The Regional District of Bulkley-Nechako still has this program running. Contact your RD if you have further questions.

**12/ Who is responsible for getting rid of these weeds?**

Depends on where they are located. On Crown land, the provincial government is responsible. On private land (including railway and hydro right-of-ways) the landowner is responsible. Ministry of Transportation is responsible for highway right-of-ways.

**13/ Farmers change the land with cattle and growing crops, adding fertilizers, and pesticides that open up the environment to new species that are better able to adapt to those conditions. Shouldn't they (farmers) look at their practices and find ways to prevent destruction of the land through their uses so that native plants survive and introduced species don't appear?**

Yes, and good farmers do. They not only live on the land but try to earn a living off of it and hope to pass it down the their children. Keeping the land healthy is in their best interest, and they know it.

14/ There are so many of these (noxious plants) in the area, how are they to be controlled?

One plant at a time. |

15/ Does the Gov't use chemicals to destroy noxious weeds? If so, doesn't this in turn disturb the balance of nature?

The noxious weeds have already disturbed the balance of nature and in many cases have already killed or weakened our native plants and destroyed food/habitat for native fauna. The control of the weeds allows nature to return to a balance. When chemical use is deemed necessary, an appropriate herbicide is selected that will do the least amount of damage to the environment as a whole. Using the correct, specific, herbicide at the correct time in the weed's life cycle can usually control the weed without harming anything else. Everyone is committed to a healthy environment, even if we don't all agree on how to maintain and safeguard it, and wide-scale use of non-specific toxic chemicals is not anybody's choice.



### THE R.E.A.P.S REPORT

The newsletter of the Recycling and Environmental Action Planning Society, (AKA R.E.A.P.S)

Box 444, Prince George, BC V2N 4S6  
Phone: 250-561-7327, fax 250-561-7324  
Website: [www.reaps.org](http://www.reaps.org)  
E-mail: [garden@reaps.org](mailto:garden@reaps.org)

The R.E.A.P.S Report is published six times a year, on the first of Jan., March, May, July, Sept., and Nov. of every year.

Articles, originals or reprinted with permission, are submitted by members and represent the opinions of the authors only, not necessarily those of the Society, Board, or members as a whole. Deadline for submission is two weeks prior to publication date.

Articles, suggestions for articles, or comments in general can be submitted to the R.E.A.P.S office, or directly to the Newsletter Editor: Barbara Rayment  
Phone: 250-964-6684, Fax 250-964-1864 or e-mail [birchcreek@telus.net](mailto:birchcreek@telus.net)

### RECYCLING and ENVIRONMENTAL ACTION PLANNING SOCIETY MEMBERSHIP APPLICATION

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

City: \_\_\_\_\_ Postal Code \_\_\_\_\_

Telephone: \_\_\_\_\_

#### Annual Membership Fee:

- Individual (\$8.00)
- Family (\$15.00)
- Business (\$25.00)
- Student (\$5.00)
- Senior (\$5.00)

I'm interested in volunteering:  Yes  No

#### Things that I would like to take part in are:

- School presentations
- Master Composter Program
- Spring Plant Sale
- General Garden Work
- Information Booths
- Fundraiser Events
- Public Workshops and Presentations
- Board of Directors

Date: \_\_\_\_\_

Cheque payable to:  
R.E.A.P.S.

Box 444 Prince George, B.C. V2L 4S6

## RECYCLE CRAFT CORNER

### Homemade Lint Clay

#### Ingredients:

2 cups firmly packed dryer lint  
1/3 cup warm water  
6 tblsp white glue  
1 tblsp clear dishwashing liquid  
food colouring

#### Directions:

Put lint into a mixing bowl. Add the other ingredients. Mix thoroughly. When you can no longer mix, knead with hands until a uniform texture. Shape and model figures or cover a mold with it. Have fun!

## COMING EVENTS

### January

- 1 R.E.A.P.S Membership due
- 22 R.E.A.P.S AGM @ Public Library -  
Bob Harkins Branch 6:30 - 8:30  
p.m.

### February

- 25-26 RCBC Educator Workshop -  
Vancouver
- 28 Seedy Saturday at Artspace (above  
Books n'Co.) 11 am - 2 pm

### March

- 22 World Water Day

### April

- 22 Earth Day
- 25 Civic Pride Spring Cleanup in  
Prince George

### May

- 1 Compost Demo. Garden opens
- 2 National Composting Awareness  
Week begins
- 29 R.E.A.P.S Annual Plant Sale 10-2  
p.m. @ garden

### June

- 5 World Environment Day
- 9-11 RCBC Conference Whistler, BC

### July

- 18 Go For Green Week begins

### September

- 16 International Day for the  
Preservation of the Ozone Layer