

THE LATEST DIRT

SPRING
2005

THE NEWSLETTER OF THE GREATER VICTORIA COMPOST EDUCATION CENTRE

COMPOSTING TOILETS! The Next Wave of Composting (Part 2 of 2)

This is a continuation of our Winter 2004 article.

If you would like a copy of the first part, please contact us at 386-WORM or info@compost.bc.ca

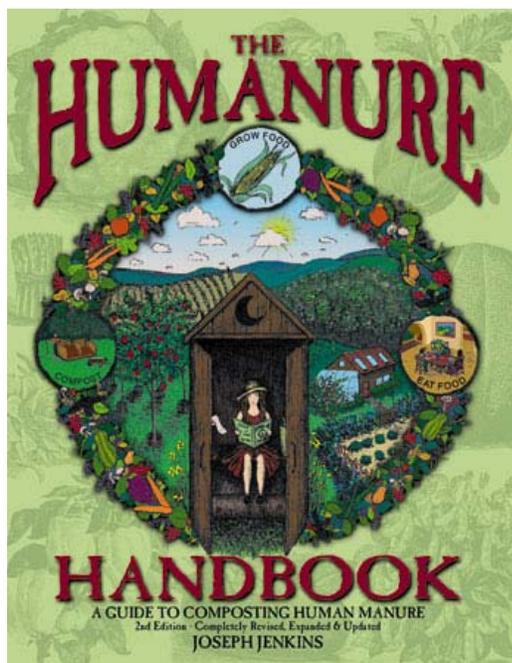
by Angela Evans, BES, MCIP

Angela Evans is a long time Compost Education Centre member. She sees composting toilets as one of the many exciting appropriate technologies available to help communities become more sustainable. Angela is a planner with Local Solutions Consulting Services, researching, writing, speaking, and engaging communities to help them towards the goal of sustainability

Isn't Maintenance a Problem?

With a well designed system maintenance is a rare but essential activity, not really a problem. Because the C:N ratio of human waste is too low for ideal composting, a small amount of carbon source such as wood shavings (sawdust compacts too easily), or crumbled dry leaves must be added to the tank regularly. And yes, toilet paper and other cellulose based hygiene products will break down just fine in a Composting Toilet (CT) tank. Plastic won't of course but at least it won't clog any pipes and cause an overflow! Just take it out of the humus-like end product when you see it.

The need for periodic user maintenance used to be the main reason why conventional engineers and health officials resisted widespread use of composting toilets. (Hey, they let us drive cars don't they?) Yet, while some systems require the turning of a crank to rotate the compost pile others are totally automated, even monitoring the moisture content of the pile and spraying it with liquid end product when it gets too dry. Some manufacturers are beginning to offer maintenance services and I can envision a time when enough customers exist in a community to support a new service business, much in the same way as furnaces and other large appliances can now be serviced.



A great resource.

For those with more skill and enthusiasm than money, plans and advice are available to build and maintain one's own CT system. In terms of home made CT's, I've seen a Korean solar toilet functioning well in dry southern Spain and a very different design used successfully in a cool temperate valley in Wales at the Centre for Alternative Technology. The simplest system is probably to take the waste from a container in the bathroom and compost it outside. Low tech, low cost and high involvement. You are unlikely to convince any municipal building inspector that this is a long term solution however! As a result I've only seen it used on Federal land by float home residents. J. C. Jenkins is the guru of thermophilic humanure composting and his book "The Humanure Handbook" is must read for all.

When it comes to taking out the end product -- a rich humus suitable for the garden -- the volume of solids in human waste is so small (about 5-10%) that once the moisture is evaporated a household of four with one of the large composting tanks may only remove 2-3 cubic feet in 2 years. The nutrient 'fertilizer' rating would be in the order of 20-12-14 (nitrogen, phosphorous, potassium). Wise composters then let it sit a further 6 months outside to ensure pathogens have not survived.

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Inside

AGM April 17th, 2pm

Slow Food showcased



The Greater Victoria

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THE LATEST DIRT**

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Slow Food Presentation to Make for an Exciting AGM!

Highlights of this year's Annual General Meeting will include guest speaker Mara Jernigan from Engeler Farms, and a Kid's Corner!

Mara will be speaking on the topic of *Slow Food, an organization and concept dedicated to *"protect[ing] the pleasures of the table from the homogenization of modern fast food and life"*.

Mara has been offering Gourmet Farm Tours in the Cowichan Valley, in partnership with The Aerie Resort, since 2001. Slow food snacks will be on hand for attendees to sample!

The AGM will take place on site at the Compost Education Centre on Sunday April 17 from 2-4pm.

Children ages 2-12 are welcome to come and participate in fun, kid centered gardening and composting activities. If you do intend to bring your children, please let us know so that we can plan to include them (386-WORM or info@compost.bc.ca).

If you have been a Compost Club member for a month or longer, you are eligible to vote for the Board of Directors and other motions. If you would like to nominate someone for the Board, please contact Lynn at 386-9676. Nominations will also be accepted from the floor.

**"Founded by Carlo Petrini in Italy in 1986, Slow Food is an international association that promotes food and wine culture, but also defends food and agricultural biodiversity worldwide. It opposes the standardisation of taste, defends the need for consumer information, protects cultural identities tied to food and gastronomic traditions, safeguards foods and cultivation and processing techniques inherited from tradition and defend domestic and wild animal and vegetable species."*

www.slowfood.com

NEW FACE AT THE CENTRE



As you drop in to buy an earth machine or participate in our workshops, you may notice a new face on the compost education block! Sean Lansdell is the newest staff member to join the Compost Education team! As a Compost Educator, Sean will be assisting in ALL our service areas for the next six months, including community outreach, schools program, hotline, visitors, and more! Sean has come prepared with a keen interest in composting and a willingness to do what it takes to get the composting message out to the Greater Victoria community. Welcome to the team, Sean!

Sean with wingdigger:
Sean practices his composting techniques

We gratefully acknowledge the core funding support that we receive from the CRD and the City of Victoria. Additional support is provided by the Fernwood Community Association and through the generosity of our Compost Club Members and the residents of Greater Victoria.

WELCOME NEW COMPOST EDUCATORS



Volunteers get some hands-on experience with sheet mulching

A friendly group of 15 trainees attended the March 4-6 session of the Compost Educator Volunteer Training Program (CEP), formerly known as the Master Composter Volunteer Training Program. Staff instructors Lynn Elliott, Chris Wells and Louise Ditmars found ingenious new ways to highlight the theoretical and hands-on aspects of composting to be used in public education at outreach events. Some components of the course were worm composting, backyard bin composting, and alternative methods such as trenching and sheet mulching. In addition, students were introduced to the basics of soil management and organic veggie gardening. In conclusion, CEP participants practiced office procedures and set up outreach display

New for this course was the stronger focus on on-site education, so that trainees would be ready to assist visitors and hotline callers during the coming months. Thanks to Board President Kathy Cook for her instruction in this area and her closing message to new volunteers.

Because making new friends is part of the volunteer experience, Sunday's agenda included a potluck lunch that allowed participants to socialize with staff, Kathy and each other. Good luck to volunteers in fulfilling their 30-hour practicum that will lead to their final certificate!

Upcoming Events

Date (Saturdays)	Topic	Time	Cost
April 2	Composting Basics	11am-1pm	Free
April 9	No-till Veggie Production	2-4pm	\$10/free for members
April 16	Organic Lawn Care	2-4pm	\$10/\$9 members
May 7	Composting Basics	11am-1pm	Free
May 7	Gardening for Fragrance	2-4pm	\$10/free for members
May 14	Plant Sale	TBA	Free
May 28	Beneficial Insects	2-4pm	\$10 /\$9 members

MUST PRE-REGISTER FOR WORKSHOPS BY CALLING 386-WORM OR EMAILING info@compost.bc.ca

Comfrey: An all purpose plant for the compost and garden!



Comfrey is a common herbaceous perennial with a wide range of functions. It propagates easily from pieces of root and is very resilient once established, so plant comfrey only where you know you want it for the long-term. Plant Comfrey:

- **In the composting area**, where it can be harvested and added to piles several times during the growing season. Comfrey has a C:N ratio similar to that of manure, accumulates vital soil nutrients such as

Potassium and Calcium, and decomposes rapidly. What more could you want to kick-start your compost?

- **In circles underneath fruit trees**, which prefer herbal ground cover to grass. Not only does comfrey tap into deep subsoil nutrients and transform them into perfect mulching material, it also brings in swarms of pollinating insects when it flowers.
- **In the medicine garden.** Comfrey's other name is "bone-knit" and is used in salves and poultices to speed the healing of bruises, sprains, and fractures. It also has other medicinal applications.

SITE UPDATE

Early March was a good time for volunteers and staff to update elements of the site- before the growing season begins in earnest! Some changes to the site that you may notice on your next visit include:

Entrance: We have removed the shed that was housed behind the gate for the past several years (some might have termed it "unsightly"!) and have replaced it with a newly mulched area- ready for plantings! We welcome suggestions for this growing bed: info@compost.bc.ca

Pathways: We have brought in new gravel to brighten up our pathways and keep weeds to a minimum.

Tool Shed Upgrade: Our shed is getting a minor overhaul and may soon be home to a living roof!

This year will also see the addition of signs to our demonstration gardens as well as the inauguration of our new irrigation system. We hope to see you here soon!



Veggie Gardens: a sharper looking site!

COMPOSTING TOILETS (continued)

What About Health Concerns?

In terms of pathogens that survive in composted human waste, testing of the commercially made CT end products show excellent results. Manufacturers are usually happy to give you copies of test results by independent labs showing faecal coliform, nitrogen and sometimes event vent gas analysis. Comparisons of any end liquid (typically occurs in cool climates) and the humus with US EPA swimming water quality standards and typical septic tank effluent are usually very much in favour of composting toilets. To be on the safe side, many manufacturers recommend stabilization of the humus for another 6 months to a year providing more than enough time to kill any possible remaining pathogens. For an extra level of precaution, most sources will also tell you not to top dress your leaf veggies and surface fruits with it but rather use around shrubs, fruit trees, or turn into vegetable beds in the fall ready for next year. Remember, germs are bad for you. However, if you use common sense, rubber gloves and soap, you have a winning combination for keeping your family safe from pathogens which can be transmitted by faecal matter.

Where Are Composting Toilets Used Now?

I know of composting toilets that are used in private homes, floating homes, and housing co-ops in Sweden, Denmark, Norway, and North America. They are also found in remote locations hard to service by conventional sewer such as camps, highway rest stops, lodges, schools, military bases, power plants, local and national parks around the world. One estimate puts the number sold in the US since 1974 at over 20,000. If you want to see some on the West Coast, test out the Phoenix brand at the Arbutus lookout on the Malahat highway, or Pacific Rim National Park (Willis Island, Schooner Cover, Turret Island, Hand Island), or one of the Clivus brand ones at the C. K. Choi building on the UBC campus in Vancouver. To see a small tank system visit the Greater Victoria Compost Education Centre on North Park and Chambers Streets or the City Farmer site in Kitsilano, Vancouver. (The great irony is how many provincial and federal sites use composting toilets and greywater systems while the provincial health and plumbing regulations are used to deny many a homeowner the same privilege!)

Why Don't We See More Composting Toilets?

The biggest impediment to the use of composting toilets and greywater systems is attitude. We come from a long human history of leaving our poo outside in a field or the woods to decompose naturally so making the transition to keeping it in a box in the house. That's considered kind of aberrant by most cultures of the world. Our health and plumbing standards and their enforcement bureaucracies are now firmly grounded in water-transported waste systems and it will take some time to shift that paradigm but I remain hopeful. An article about the World Water Forum in 1993 quoted the UK's ex-chief drinking water inspector as saying if Britain were to plan sewage disposal from scratch today "we wouldn't flush it away - we would collect the solids and compost it." Now that's a hopeful statement.

For those who'd like to learn more about the technical aspects of human pathogens and composting human waste I would recommend the books "The Humanure Handbook" by J. C. Jenkins and "Sanitation Without Water" by Winblad and Kilama, MacMillan Press. Vancouver's City Farmer website www.cityfarmer.org/comptolet64.html has excellent links and websites for commercial brands include:

- Sun-mar (small tanks): www.sun-mar.com
- Envirolet (small tanks): www.sancor.ca
- Phoenix (large tanks): www.compostingtoilet.com
- Separetoilet (separates urine from feces) : www.separett.com
- Clivus Multrum (large tanks): www.clivus.com

SEEDS FOR SALE



The Compost Centre is happy to announce that we are now carrying a wide selection of locally grown, organic vegetable and flower seeds for sale. We have varieties from Salt Spring Seeds (Salt Spring Island); Full Circle Seeds (Sooke); Two Wings Farm (Metchosin); and Seeds of Victoria (Saanich). To purchase your seeds, drop by the Centre from Wed-Sat from 10am-4pm (cash or cheque accepted). For more information, drop by or give us a call: 386-WORM.

THANK YOU FOR YOUR DONATIONS

We wish to extend our sincere thanks to the following individuals for their generosity in donating to the Centre.

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|------------|------------------|
| A. Lovejoy | P. Brennan |
| P. McMahon | E. and P. Mulvey |
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