

# BC Organic Grower

Vol. 7, No. 1

Spring 2004



**President's Report**

**BC Consultation Session**

**New Fees for 2005**

**Microbes at Work:**

*Stimulating natural suppression of plant diseases*

**Animal Welfare Certification**

**AGM Report**

**Founder's Award**

**Maude Island Farm**

**New Hops Growing Manual**

**A Promising Molluscicide**

**Egg Struggle Continues**

**Audit Trails**

**Aquaculture**

**The Threat of Privatized Seeds**

**Plant Improvement for Organic Seed Growers**

**A Great Opportunity**

**Soil Health Assessment in Organic Farming Systems**

**COABC, #8A, 100 Kalamalka Lake Rd.**

**Vernon BC V1T 9G1**

## President's Report

by Patrick Mallet

In the days leading up to the recent COABC AGM and Conference, I was in Germany, attending the Biofach, the world's foremost organic trade fair. The Biofach is an inspiration – it is a vision of what the future of organic production can look like. Exhibition hall upon hall of organic food, wine, clothes, and cosmetics. It is not really even the quantity or choice of organic products that is so inspiring, but the recognition that organic production is a force to be reckoned with; that it is already part of the mainstream culture in Europe and continues to grow in leaps and bounds.

Our own conference, *BC's Organic Future 2004*, reflected that same optimism about how far we've come and the potential for organic agriculture to be even more of a mainstream market force in British Columbia in the future. My impression of the weekend was of a movement coming together. Every year, turnout for the AGM increases – this year we easily maxed out our registration limit of 170 with more people clamouring to participate. And what a great weekend it turned out to be...

There is something inspiring about farmers, processors and distributors getting together to talk shop. The framework for the seminars was a well-planned and diverse line-up of practical workshops that allowed for in-depth discussions about topics as diverse as Compost Tea, Post-Harvest Handling and Tree Fruit Pest Management. The unifying theme was improved production practices and it was a hit with conference participants. The weekend's events were punctuated with a few truly memorable speakers – Arnold Taylor from the Saskatchewan Organic Directorate (SOD) reminded people on Saturday evening that we have to keep our eyes on the big issues and stay united to protect the integrity of organic agriculture. The evening's rousing Auction (a highlight any year!) raised over \$2,700 in support of SOD's legal campaign to prevent the introduction of new GM products. Mario Lanthier's Sunday morning plenary session on Soil Health and Fertility Management had people gasping with delight over micro-organisms – no, seriously. (see pages 6-10 for article.)

And while there was a wealth of knowledge to be shared, there was also a fair amount of business to be conducted at the AGM. The meeting ran for most of the day on Saturday and was structured to provide opportunities for participants to discuss some of the main proposed changes in the way that COABC operates. And most of the discussions turned out to be fruitful and lively.

In the end, we took some fundamental steps forward, ensuring that we are better organized to tackle the challenges that lie ahead. Many of the issues emerged out of the Board's significant work over the last six months to establish options for restructuring. We recognized the distinction between COABC's 'core' activities, such as accreditation, standard-setting and logo management, and 'key' activities that support the growth of organic agriculture in BC, including education, research, promotion and advocacy. To that end, members passed a resolution supporting the need for our licensee fees to cover the costs of delivering the core functions of the organization (see page 5). COABC will seek to raise funds from other sources and activities that will also allow us to deliver some of the key activities that you have prioritized.

AGM participants also discussed and supported the notion that members of the public should be actively encouraged to support COABC through donations. We are a strong constituency of organic practitioners around the Province. We each have a network of customers and contacts who actively support local organic agriculture by buying our products. We would like to harness this goodwill to build a stronger community of supporters who can get involved with COABC in a number of ways, from simple donations to active volunteerism. Lee Fuge, our new Consumer / Environment representative on the Board of Directors is spearheading the drive to encourage public support. If you would like information and promotional materials to share with your customers and colleagues, I encourage you to contact the COABC office.

The AGM and Conference is our one opportunity each year to get together and share stories

about our work and our plans for the future. It is also the place where we can reinforce our shared vision for a sane and sustainable agriculture economy. If you missed it this year, I hope you'll plan to join us in Victoria in February, 2004.

Happy Spring!

Patrick Mallet



COABC Board of Directors 2004:  
L of sign: Harvie Snow (FVOPA), Lee Fuge (Consumer/Environment), Hermann Bruns (NOOA), Patrick Mallet (President, KOGS); R of sign, back row: Lee McFadyen (LEOGA), Gottfried Sellmer (PACS), Arlene Solomon (STOPA), Deb Foote (PACS); second row: Hans Buchler (SOOPA), Stephen Gallagher (BCARA), Sonia Stairs (BOPA), Tim Ewert (PACS), Walter Harvey (Bio-Dynamic); front row: Peter Johnston (IOPA) Missing: Tony Cetinski (PACS)

### Standards Changes

The motion to ratify the Greenhouse Draft Standard, which has been in place and posted for 12 months was passed, with the one amendment stated below.

17). With regards to the container growing medium, the draft says "a biologically active soil must be evident in the containers by the end of each growing cycle".

To be replaced with

17). "a biologically active growing medium must be evident in the containers by the end of each growing cycle".

Section 3.3.2 (3) Transplants, (4) Mushroom, (5) Sprout, 11) Processing

Remove the 2 inspection requirement leaving to the discretion of the certification body, or remove the 90 day requirement in processing. Replace with wording "Enterprise has received appropriate inspections and meets the requirements specified by the BC Certified Organic Program.

Further draft changes to the standards will be printed in the June/July edition of BCOG and these changes, as well as future changes will also be posted on the COABC website.

## BC Organic Grower

is received by all members of organizations belonging to the Certified Organic Association of British Columbia. BC Organic Grower is published quarterly by COABC.

We welcome letters to the Editor (300 words maximum) and articles (1000 words maximum). We reserve the right to edit for length.

**Letters & submissions to:**  
Cathleen Kneen, Editor  
S6 C27 RR#1  
Sorrento BC V0E 2W0  
phone/fax: 250-675-4866  
cathleen@ramshorn.bc.ca

**Advertising** (rates & copy) & non-member **subscriptions** (\$20/year plus \$1.40 GST) to:  
COABC  
#8-A 100 Kalamalka Lake Rd.  
Vernon BC V1T 9G1  
phone: 250-260-4429  
fax: 250-260-4436  
office@certifiedorganic.bc.ca

For general information or to contact your local Certifying Body, call the office – or check our website:  
**www.CertifiedOrganic.bc.ca**

**Cover Photo:** Testing for microbes. Standard laboratory testing indicates this finished compost contained the root pathogen *Fusarium* (white colonies), but also the beneficial fungus *Trichoderma* (green colonies), which aggressively attacks and destroys *Fusarium* and *Pythium*. Photo Mario Lanthier

Layout & Design: Rebecca Kneen  
gael@ramshorn.bc.ca

### Disclaimer:

Products advertised in the BCOG are not necessarily approved for use by organic farmers/processors. Please consult the Materials List.

**Next Issue Deadline:**  
**June 1, 2004**

Canadian Publications  
Mail Agreement  
#40047167



## BC Consultation Session

by Paddy Doherty

Ken Bruce really put his foot in it. Representing the Canadian Food Inspection Agency, and trying to explain what the CFIA does, he made the mistake of using the word 'testing', in conjunction with a description of the proposed Canadian Organic Regime. To the large (150) group of keen organic farmers, traders and processors, the mention of testing was like waving a red flag in front of a US politician. The reaction was immediate, negative, and suspicious. Poor Ken took the brunt of it.

Such concerns made the Organic Regulatory Consultation Session at BC's Organic Future 2004 Conference a very lively discussion indeed. It was nevertheless informative, and, I think, ultimately helpful.

The CFIA people were at Naramata to explain the process for the development of an Organic Regulation and to hear the concerns and opinions of the organic sector. The CFIA is, of course, a testing and enforcement-oriented agency and tends to see its job with that vision.

Part of the CFIA's mandate is to test products for pesticide residues and other contaminants - non-organic as well as organic. They do this all over the country, and I am glad of it. For just one example of the positive outcomes of random testing, they have found sugar in Chinese honey. One organic farmer spoke up to say that her produce had been tested by the CFIA - not as part of any organic program, but as one test sample among many hundreds of other produce samples (non-organic and organic) the CFIA analyses over the year.

The current draft Canada Standard has three references to testing. None of them differ from the COABC standard in that testing is at the discretion of the Certification Body and (except for soil tests) is not prescribed. It will be up to the organic sector (represented by the Organic Regulatory Committee) to ensure that the

Regulation reflects our wishes and values, and does not become burdened with excess government rules.

The attitude of us-versus-them with the CFIA is unfortunate, though maybe it's inevitable. However, we must remember that it was the Canadian organic community that asked for an organic regulation. The government was satisfied with a voluntary program - for them it was cheaper and easier. We had to convince the government (the federal minister has yet to be convinced) that the organic sector is united and determined to have a mandatory program for organic in Canada.

The other (major) issue arising from the BC Consultation Session was the affordability of the proposed organic regime. Obviously no-one wants to pay more for their certification. There were no answers to this problem, though the ORC has been working on it, and there have been

suggestions from other consultation sessions. Ideas include:

- Allowing the use of group certification based on regional relationship (location)
- Requiring accreditation of Certification Bodies (for certification of operators) only for products crossing provincial boundaries
- Reduced certification requirements (inspections once every 3 years, for example) for certain categories of organic operators
- No certification required (some sort of registration instead) for operators selling direct to consumers

The AAFC has developed a webpage to assist the consultation process. Please go to <http://www.agr.gc.ca/publicon/> Agriculture and Agri-Food Canada - link to Consultations to find out more and complete a questionnaire. ✓



CFIA Representatives at the BC section of the Consultation on the Canadian Organic Initiative, Naramata, February 2004

## New Fees for 2005

After considerable discussion, a fee schedule was approved for 2005 which reflects the commitment to cover the costs of core activities from fees. It was recognized that this commits the COABC to undertake fundraising in order to deliver key activities such as advocacy, promotion, and farmer education. The new schedule is:

| Category | Gross Organic Sales | 2005 Fee |
|----------|---------------------|----------|
| 1        | < 10K               | \$94.60  |
| 2        | 10K - 20K           | \$122.10 |
| 3        | 20K - 30K           | \$149.60 |
| 4        | 30K - 40K           | \$177.10 |
| 5        | 40K - 50K           | \$204.60 |
| 6        | 50K - 60K           | \$232.10 |
| 7        | 60K - 70K           | \$259.60 |
| 8        | 70K - 80K           | \$287.10 |
| 9        | 80K - 90K           | \$314.60 |
| 10       | 90K - 100K          | \$342.10 |

| Category | Gross Organic Sales | 2005 Fee |
|----------|---------------------|----------|
| 11       | 100K - 125K         | \$369.60 |
| 12       | 125K - 150K         | \$397.10 |
| 13       | 150K - 175K         | \$424.60 |
| 14       | 175K - 200K         | \$452.10 |
| 15       | 200K - 300K         | \$507.10 |
| 16       | 300K - 400K         | \$562.10 |
| 17       | 400K - 500K         | \$617.10 |
| 18       | 500K - 750K         | \$720.50 |
| 19       | 750K - 1 Million    | \$759.00 |
| 20       | 1 Mil - 2.5 Million | \$836.00 |
| 21       | 2.5 Mil - 5 Million | \$869.00 |
| 22       | 5 Mil - 7.5 Million | \$924.00 |
| 23       | > 7.5 Million       | \$979.00 |

\* License fee is a percentage of gross income and is calculated on the lower end of the gross income category.

Please see pages 12-13 for more on the AGM. ✓

## In-Season Farms Ltd.

At In-Season Farms, organic integrity and quality are the factors driving our business. We deal *only* in *Organic* products.

- BCARA certified
- Certified organic feed producer since 1993
- Pick-up, Delivery
- Bags, Mini-bulk or Bulk

**Certified  
Organic  
Feeds**

**(604) 857-5781**

**Fax: (604) 857-1689**

**Email: [isfarms@telus.net](mailto:isfarms@telus.net)**

**27831 Huntingdon Rd. V4X-1B6  
Abbotsford B.C.**

- Poultry
- Livestock
- Swine
- Custom rations

*Also available  
at Otter Coop  
Feed Dealers*

# Microbes at Work: Stimulating Natural Suppression of Plant Diseases

by Mario Lanthier

In 1996, researchers at Ohio State University published a landmark study.

When cucumber seeds were grown in a composted bark medium, then injected with the disease anthracnose, the plants showed fewer symptoms of infection than similar plants grown in aged peat moss. Also, the cucumber plants growing in composted bark had a much higher level of peroxidase activity, a natural marker of systemic acquired resistance in plants.

This work by Dr. Harry Hoitink and his group was the first scientific report of a direct link between growth in compost and stimulation of systemic acquired resistance. Since, much progress has been made to understand the mechanisms at play. Growers now have access to a number of different procedures and products to take advantage of the natural phenomena.

This presentation reviews some of the current technological knowledge.

## On-Farm Composting

Composting is the biological decomposition of organic waste under controlled conditions.

Usually, three phases occur during composting:

- An initial hot phase of 1 or 2 days, during which the smaller material is rapidly degraded.
- A period of many weeks when temperatures reach 45 to 65°C and most microbes are killed.
- A final curing phase when temperature declines and the material is re-colonized by microbes.

The curing phase is important for natural disease suppression. After peak heating, different micro-organisms colonize the piles, including many parasites of root rot pathogens. Examples include species of *Bacillus*, *Flavobacterium*, *Streptomyces* and *Trichoderma*.

Two specific factors will help growers who wish to take advantage of this natural process.

**Maintain moisture on the outside of the pile.** A film of moisture must be present on the surface for microbes, especially bacteria, to successfully colonize the piles during curing.



*Nature's Nutrients*  
Armstrong, BC

**Nutri-Gro**

organic composted poultry manure  
✦  
screened  
✦  
delivered to your door  
✦  
current analysis reports available on request  
✦  
average analysis NPK 4-2-2

ph: (250) 549-0322  
fax: (250) 564-0340  
email: nsjo322@telus.net

Compost that is stored dry (under 35% moisture) tends to be more conducive to *Pythium* diseases.

**Produce the compost near a forest.** Composts produced near a forest benefit from colonization by many beneficial microbes found in natural areas. These composts routinely test positive for presence of *Trichoderma*, a fungus associated with suppression of different root rot pathogens.

## Mechanisms of Disease Suppression

**Direct competition:** beneficial soil microbes will out-compete root pathogens for food, especially *Pythium* and *Phytophthora*. Typically, when plant roots are growing, they release a number of amino acids and other molecules into the soil, which attract plant pathogens. Beneficial microbes remove the nutrients from the root zone, eliminating the "signal" sought by pathogens.



**Systemic acquired resistance:** many beneficial soil microbes promote the manufacturing of plant proteins that are involved in disease tolerance. In a way, the microbes stimulate a healthy plant. Researchers have demonstrated such an activity by mycorrhizal fungi.

**Mycoparasitism:** some beneficial soil microbes are known to actively attack plant pathogens, destroying their structures and feeding on their cell content, thus preventing root infection. This process works well for suppression of *Rhizoctonia* and

*Fusarium* in greenhouse production.

**Antibiosis:** some microbes produce competitive products that kill or inhibit plant pathogens. For example, woody material that is partially composted and low on food will force *Trichoderma* fungi to start releasing substances that are toxic to other soil microbes.

*Adapted from Hoitink H.A., A.G. Stone, D.Y. Han. 1997. Suppression of Plant Diseases by Composts. HortScience, 32(2): 184-187*

## Peat Moss Products

Sphagnum peat moss, a material commonly used in greenhouse production and field plantings, is a primitive plant growing in a bog. The product appearance is an indication of microbial quality.

**Light fibrous peat:** this material is harvested from the top 1.2 meter of the bog and usually

*continued on page 8...*

**Nature's Path Supports Organic Farmers.**

More organic farms,  
means more organic land,  
means more organic food.

*live long, eat well.*  
www.naturespath.com

## Presence of root rot pathogens in commercial peat moss products

| Peat moss product | Phytophthora | Pythium   | Fusarium |
|-------------------|--------------|-----------|----------|
| Brand #1          | 0            | Very low  | Very low |
| Brand #2          | 0            | Very low  | 0        |
| Brand #3          | 0            | Low       | 0        |
| Brand #4          | Low          | Very high | Very low |

*Rating based on number of propagules per gram of soil. Testing at Ribeiro Plant Lab, Washington State. <http://www.ribeiroplantlab.com>*

... continued from page 7

comes with higher beneficial microbial activity, competing for nutrients with the pathogen *Pythium*.

**Dark fine peat:** this material is harvested from deeper layers in the bog, is typically low in microbial activity, and often conducive to root disease caused by *Phytophthora* and *Pythium*.

As a routine procedure, our company is testing peat moss and compost materials for presence of root rot pathogens. *Pythium* and *Fusarium* are commonly found in very low level in most samples. However, in some products, the root rot pathogens are found in very high levels.

In the picture at right & table pg 7, the products #1, #2 and #3 are excellent quality for plant production. Product #4 is very poor quality and could trigger a serious disease outbreak if kept wet for too long.

### New Microbial Products

Over the past two years, new commercial products made from naturally occurring soil microbes were registered in Canada. They show excellent results against specific soil-borne diseases.

#### **Mycostop** (*Streptomyces griseoviridis* strain K61)

This product was registered in 2003 for the control of damping off and stem rot caused by *Fusarium* in greenhouse ornamentals and veg-



Mycostop trials on Goatsbeard – plants on right have been treated with Mycostop.



Commercial peat moss samples: light fibrous peat moss is the best for plant production, while sample 4 could trigger a serious disease outbreak.

etables. The product is approved by OMRI (Organic Materials Review Institute), and thus can be used by organic farmers.

The active ingredient, *Streptomyces*, is an actinomycete bacteria widely distributed in most soil types. It is known to colonize the root area of plants, where it feeds on exudates and outcompetes the pathogens. Research trials also indicate it can improve plant growth and yield.

#### **Rootshield** (*Trichoderma harziannum* strain KRL-AG2)

This product was registered in 2002 for the suppression of soil-borne diseases in greenhouse crops such as tomatoes, cucumbers and ornamentals. The active ingredient, *Trichoderma*, is a fungus commonly found in many soils, especially in the forest humus layer.

After growing towards the fungal pathogen, *Trichoderma* secretes enzymes that degrade cell walls, allowing it to invade its prey and feed on the cell content. For diseases caused by *Rhizoctonia*, *Pythium*, and *Fusarium*, researchers indicate a suppression effect rather than complete control. For best results, the product must be applied early in the crop production. Rootshield is approved by OMRI.

#### **Mycorrhizal products**

Mycorrhizae are specialized fungi that live on plant roots in a mutually beneficial relation-

ship. They are very common in nature, but less common in disturbed agricultural soils or in potting mixes. Plants colonized by mycorrhizae have a higher tolerance of environmental stresses caused by drought, cold, replant, low fertility, or presence of root rot pathogens.

Over the past 3 years, our company has tested commercial mycorrhizal products in different nursery and greenhouse settings. We have documented a number of benefits for the treated plants, including more rapid root development and higher survival after replanting.

### Compost Tea

Compost tea is the water extraction of microorganisms found in the parent compost material, and processed to increase the total microbial population. The tea is applied to the soil to stimulate microbial activity, or on the plant to stimulate plant defences against disease infection.

Recently, researchers have compared the merits

of “fermented compost extract” (without aeration) and “aerated compost tea” (with active air supply). Research projects are underway and early results indicate enormous potential to induce disease resistance in plants.

A number of practices are currently recognized as critical to produce high quality compost tea.

- **Use a commercial machine.** Different commercial brewers are now available. Manufacturers testify their equipment was tested and will deliver a consistent quality of finished product.
- **Use high-quality start-up material.** A compost material of high quality will result in a compost tea with a rich diversity of microbes, offering the potential of many benefits after use.
- **Maintain a high oxygen level.** Commercial brewers typically have a pump

continued on page 10...

# Organic Seed...

Organic Forage Seed now available from Richardson Seed

## Phone for your Richardson Organic Seed

- Orchardgrass
- Creeping Red Fescue
- Timothy
- Tall Fescue
- Red Clover

- White Clover
- Tetraploid Perennial Ryegrass
- Tetraploid Italian Ryegrass
- Kentucky Bluegrass
- Peas

Richardson Seed is a division of TerraLink Horticulture Inc.

Phone 1-800-661-4559

For your closest distributor  
or for product information

... continued from page 9

system to maintain the oxygen level above 6ppm, seen as necessary to stimulate beneficial microbes, especially fungus.

• **Avoid animal manures.** Fermentation of human pathogens such as E. coli is a serious concern in food production. Avoid stimulants such as animal manures, low oxygen level or sugar additives.

### Compost Tea "recipes"

During compost tea brewing, food can be added to stimulate the growth of specific microbes. The type of food depends on the desired finished product and compliance with local standards.

The following start-up recipes are designed for 50 gallons of water mixed with 9 kg of compost.

#### Bacterial tea (for vegetable crops and grasses)

Add 500 ml of blackstrap molasses and 250 grams of soluble kelp.

#### Fungal tea (for shrubs, vines and trees)

Add 600 ml of humic acids and 250 grams of soluble kelp.



aerated compost tea

Adapted from Ingham E.R. 2002. *The Compost Tea Brewing Manual*. Soil Foodweb Incorporated, Corvallis, Oregon. Available at <http://www.soilfoodweb.com/>.

### For more information:

• W. Zhang, W. Dick, H.A. Hoitink. 1996. *Compost-Induced Systemic Acquired Resistance in Cucumber to Pythium Root Rot and Anthracnose*. *Phytopathology* 86: 1066-1070

• The Canadian label of MycoStop can be found by searching at <http://www.eddenet.pmr-arla.gc.ca/4.0/4.0.asp>.

• Maronek D.M., J.W. Hendrix and J. Kiernan. 1981. *Mycorrhizal Fungi and Their Importance in Horticultural Crop Production*. *Horticultural Reviews*, Volume 3.

• <http://mycorrhiza.ag.utk.edu/mycor.htm>. An internet website devoted to mycorrhizae, with links to other sites.

• Scheurell S., W. Mahafee. 2002. *Compost Tea: Principles and Prospects For Plant Disease Control*. *Compost Science & Utilization* 10(4): 313-338.

• More information on compost tea: the Compost Tea Industry Association, in Oregon, <http://www.compost-tea.org/>, and the International Compost Tea Council, based in Washington State, <http://www.intlctc.org/events.htm>.



Mendel Rubinson (STOPA) tries his hand at a different kind of plowing while on a farm visit in Cuba. Photo courtesy Ron Pither (IOPA)

## Animal Welfare Certification

by Alyssa Bell Stoneman

In June 2003, COABC and the BC SPCA signed a memorandum of understanding (MOU) enabling interested BC Certified Organic enterprises to apply for certification under the SPCA Certified program and undergo a joint inspection. The MOU was designed so that participating Certified Organic farmers did not need to undergo two annual inspections, or pay two inspection fees. The BC SPCA is currently working with several Certification Bodies to fine-tune the joint inspection process.

The BC SPCA believes that animals need the opportunity to express behaviours that promote their physical and psychological well-being. Over the past several decades, mechanization has changed production standards for farm animals resulting in cheap food, but often compromised farm animal conditions. The BC SPCA is striving to change that with its food labelling program SPCA Certified, launched in 2002 with three farmers (two were certified organic). The

organic industry has always taken the needs of animals very seriously; as such, the BC organic standards for livestock meet or exceed BC SPCA standards. The BC SPCA supports the organic standards and continues to engage in collaborative efforts with BC organic associations.

Enterprises interested in being certified by the BC SPCA can contact their local CB or the BC SPCA Farm Animal Program for SPCA Certified registration forms, program standards and manuals. Certification is valid for one year, and requires registration, verification, and the payment of an administration fee (\$60 - \$40 of which is returned to the CB to cover its costs).

COABC CBs and members interested in learning more can contact the BC SPCA Farm Animal Program (email: [farminfo@spca.bc.ca](mailto:farminfo@spca.bc.ca); telephone: 604-681-7271).



**Happy Planet**  
is a proud processor of certified organic fruits grown in B.C.

- Our products are made fresh locally, with nearly 60% Canadian-grown ingredients.
- Happy Planet is the only Canadian producer of certified organic smoothies.
- We offer the largest selection of refrigerated fresh juices and smoothies available in Canada.

happy planet™

Look for us at Capers, Choices, Meinhardt's, Nature's Fare, Quality Greens Farm Market, Safeway, Save-On Foods, Starbucks, Sweet Cherubim, The Organic Grocer, Thrifty Foods, Urban Fare, IGA, and lots of other great places.

phone (604) 253-7550 fax (604) 258-9462 e-mail [happy@happyplanet.com](mailto:happy@happyplanet.com) [www.happyplanet.com](http://www.happyplanet.com)

**Fre-Da-Ro Farm**  
90 Anderson Road, Enderby BC

pet food  
brown eggs  
breeding stock

beef, lamb  
grain, straw  
alfalfa

Willem Roell ph: (250) 838-6684

**QUALITY ASSURANCE INTERNATIONAL**  
\* ORGANIC CERTIFICATION SERVICE \*

Accreditations: Quebec Accreditation Council  
VBP (Europe), USDA (USA), JAS Standards/MAFF (Japan)  
Operations: Canada, USA, Mexico, Japan

< Q.A.I. North American Offices >  
Canadian Office (Collingwood, ON):  
Torrado Nimmo, Manager  
(705) 443-4444; FAX: 444-0380  
[corgania@georgian.net](mailto:corgania@georgian.net)  
U.S. East Coast (VT) (802) 434-5535  
U.S. Midwest (MN) (612) 824-3404  
Head Office (CA) (858) 792-3531

## Sponsors

**Organic Sector Development Program**

**Pro Organics**  
www.proorganics.com  
wholesaler of organic foods,  
local and international

**Wild West Organic Harvest**  
www.wildwestorganicharvest.com  
certified organic grocery  
wholesaler

**Jerseyland Organics**  
www.jerseylandorganics.com  
organic dairy products & beef  
(see ad pg. 20)

**Capers**  
organic & health food retailer  
www.capersmarkets.com

**Nature's Path**  
organic and non, cereals and  
breakfast foods (see ad pg. 7)

**Discovery Organics**  
organic grocery and produce  
wholesaler

**Happy Planet**  
www.happyplanet.com  
juice and smoothies

**Eatmore Sprouts & Greens**  
sprouts in all shapes and  
shades of green

**Crannóg Ales**  
www.crannogales.com  
certified organic farm brewery

**Summerhill Pyramid Winery**  
certified organic wines

**Pacific Western Brewery**  
organic & non-organic beer

**Hainle Vineyard**  
wine from organic grapes

## AGM Report

### Accreditation Audit

Anne Macey, chair of the Accreditation Committee noted that there is no cost at present to CBs for accreditation, but they do have annual accreditation requirements to fulfill. Both PACS and FVOPA underwent ISO follow-up audits. The Committee must prepare for any additional requirements for USDA-NOP recognized CBs. The Level II Regional Audits this year were LEOGA, NOAA, and SOOPA. The auditor was from Nebraska, and was very pleased with the COABC program. The audits went well, with only minor points to be addressed, including the need for confidentiality agreements within CBs and committees and tighter procedures to deal with conflict of interest among committee members. The Audit committee must prepare for any additional audit requirements for USDA-NOP recognized CBs.

### Standards Review

Lee McFadyen, chair of the Standards Review Committee, reported that the committee was very busy, preparing a draft standard for Pacific salmon and shellfish (a 4th draft is being prepared, more work is needed) and finalizing Greenhouse standards. Standards being proposed in the future include land care (golf course, parks, schools provincial act would need to be changed), body care, and rabbits. The SRC would like to see active representation from all CBs, as not all were represented in 2003. The SRC deals with questions, concerns or proposed changes from all members.



Greg Awai, Brewster Kneen, auctioneer, and Paddy Doherty spot more kids spending their parent's money at the lively and very successful auction. Over 70 items were donated to the auction, among them: apples & garlic braids, organic soap, chocolates, books, pottery and other crafts, an organic wool blanket, and gift baskets of organic fruit and packaging materials, as well as a compost tea brewer and gourmet cooking classes. The hit of the evening was a rendition of "The Field Behind the Plow" by the PROPA Singers, which alone raised \$340 for SOD.

### Personnel

Cathleen Kneen reported that the Committee has developed a personnel policy. Kirsten Kane (Administrator) and Vivian McGee (hired for two days per week as Assistant to Kirsten) are now "employees" rather than contractors. Rob Korbynn was contracted to look after the COABC website on a limited time basis.

### Finances and Budget

Sharyn Pollit presented the 2003 financial report and proposed 2004 Budget (available on request). The budget was amended to include provision for one day of paid work per month to support each of the Accreditation Committee and the Standards Review Committee. Fees for 2004 are unchanged from 2003.

After considerable discussion, a fee schedule was approved for 2005 (see page 3)

### Restructuring

Patrick Mallett reviewed the proposals developed by the Board. It was agreed that the organization will move to a system of proportional representation. This means that each member CB has one vote and member CBs with more than 50 licensees will have an additional vote for every additional 50. In other words, a CB with 50 or more licensees has one vote; with 100 or more, 2 votes; with 150 or more, 3 votes; and so on. The Board will ensure that our Constitution and Bylaws are amended to reflect this decision.

It was also agreed to undertake a campaign to recruit supporters for the COABC who may or may not be organic farmers. Supporters will receive the BC Organic Grower and have the opportunity to become involved in education and promotion of organic principles and practices. This will not only broaden the base of COABC as an organization but help us move towards our vision of an organic movement in BC.



Jerry Kitt plays a pig in Tim Ewert's demonstration of low-stress animal (?) handling, as Ted Buchan approves. Part of the Livestock Management workshop. A Livestock Caucus of COABC has been formed, and is addressing the impending provincial changes to the slaughterhouse regulations.



Oscar Somasco, leader of the conference workshop on cover crops and green manure, discusses compost tea with Robert Norson of Bob's Brewer from Washington State - one of the three different makes of compost tea brewers demonstrated at the conference.

**Wildwood Farm**  
Pouce Coupe

**Wildfire Bakery**  
Victoria

**Wildflight Farm**  
Mara

**Thrifty Foods**  
Saanichton

**Thomas Reid Farms**  
Langley

**Urban Harvest**  
Kelowna

**Snow Farm**  
Surrey

**Nathan Creek Organic Farm**  
Abbotsford

**Sudoa Farm**  
Sorrento

## Donors

**Across the Creek Organics**  
Pemberton (see ad pg 22)

**Anita's Organic Grain & Flour Mill**  
Chilliwack

**Aran Speltz Bakery**  
Vancouver

**Avalon Dairy**  
Vancouver (see ad back cover)

**Basil Olive Oil**  
Pitt Meadows (see ad pg. 30)

**Beland Organic Foods**  
Vancouver

**Big Root Organic Farm**  
Cawston

**Biovia Organic Link Inc.**  
Vancouver

**Bob's Brewer**  
Washington State

**Echo Oils Inc.**  
Christina Lake

**Dragon Mountain Farm**  
Quesnel

**Forstbauer Natural Food Farm**  
Chilliwack

**First Nature Farm**  
Goodfare AB

**Four Creeks Ranch**  
Silver Valley AB

**Fresh is Best Salsa**  
Kamloops

**Glorious Garnish**  
Aldergrove

**Heron Bay Farm**  
Lasqueti Island

**Kildara Farms**  
Sidney

**Little Creek Gardens**  
Kelowna

**Mariposa Organic Farm**  
Cawston

**McLennan Creek Dairy Ltd**  
Abbotsford

**Mennell Orchard**  
Cawston

**Moonstruck Organic Cheese**  
Salt Spring Island

**Mountain Meadow Sheep Dairy**  
Chase

**Olera Farms**  
Abbotsford

**Olympic Dairy**  
Delta

**Organa Farms**  
Yarrow

**Salt Spring Island Coffee**  
Salt Spring Island

# BC's Organic Future 2004: AGM & Conference

# BC's Organic Future 2004: AGM & Conference

## Founder's Award

by Cathleen Kneen

I was deeply honoured at the AGM to be the recipient of The Founder's Award. It's quite something, as an enthusiastic volunteer with COABC, to be considered in the same category as the previous recipients of this award.

Founders who have been honoured by receiving this award are:

Fred Reid (1998) was one of the key actors in creating COABC, when it became clear that the 'Organic Alliance' was not going to move toward the vision of a province-wide body that could work together to develop and ensure the integrity of an organic standard.

Fred is a trained pedologist (soil scientist) and worked for a number of years as a professional, both in Canada and overseas, before returning to BC when his father retired to take over the family farm. Environmental and health concerns spurred him to move to organic methods, certifying originally with Wild West. Later he helped found the BC Association for Regenerative Agriculture and then COABC. Having been forced to give up his egg business, he is currently growing raspberries and vegetables. (see also page 21)

Hans Buchler (1999) was a founder of the first certifying body in BC, the South Okanagan Organic Association (SOOPA). Hans left a market garden in Switzerland to move to Canada in 1981, growing wine grapes organically on about 20 acres. He was the SOOPA rep in the discussions which led to the formation of COABC from the Organic Alliance. One issue was that the Alliance insisted adamantly on "whole farm" policy, while the new COABC represented, and still does, certification by production unit. Depending which side of that debate you are on, Hans says, he can take some of the blame or credit for the formation of the COABC. "The compromise was achieved over a few pints of beer in Cloverdale. Bill Smith later said he would have encouraged me to drink beer for lunch early on, had he known how pliable I can become," he adds.

The new organization had a vision of more than



Cathleen Kneen receives the 2004 Founder's Award from Patrick Mallet

half the farms in BC becoming organic. "We wanted the world," he says; now, a bit more pragmatic, Hans notes that such growth would require the kind of logistic and financial support from government that other countries provide to the organic sector, where for example in Switzerland farmers receive on average a direct payment of \$35,000 for organic and/or sustainable practices. Hans has served as COABC President and is currently the SOOPA representative on the Board.

Harvie Snow (2000), with his wife Susan, runs one of the larger vegetable farming operations in the Fraser Valley. A professional agrologist, he has worked for the Ministry of Agriculture and provided substantial support for the fledgling organic movement in that capacity. The Snows were active members of BCARA, but left to help form the Fraser Valley Organic Producers Association, FVOA (pronounced, according to Harvie with a twinkle, "faux pas") when some of the larger operations wanted to ensure their capacity to export under the ISO 65 rules.

Harvie represents FVOA on the Board of COABC and has recently been the key organizer for the organic events at the Lower Mainland Horticulture Improvement Association.

Brian Mennell (2001), was born and raised on an orchard in Cawston. After earning a BSc in

Horticulture, he returned to fulfill his life dream of farming in 1972, and went organic in 1990. With Linda Edwards he now grows apples, pears, and cherries for discriminating customers in Canada and overseas. Mennell Farms is a significant employer in their community, and a number of their former employees are now farming on their own.

Brian was a founding member of the Organic Producers Association of Cawston and Keremeos (OPACK) and was also involved in the founding of COABC, serving on the Board and, for many years, chairing the Audit Committee (he still serves on that committee). Brian spent uncounted hours working with the Canadian Organic Advisory Board to lay the foundation for a national Organic Standard.

The word "indefatigable" was invented to describe Mary Forstbauer (2002). Mother of 12 children ("with only one husband", she jokes), she has also been the driving force behind a long list of organizations, including the Farmers' Markets Association, BCARA, and the Bio-Dynamic Agriculture Society of B.C., to name just a few. Despite the ongoing commitment of the Forstbauer Family Farm to other markets and customers, Mary has found the time and energy to be the backbone of several small local markets in the Fraser Valley, selling the quality organic vegetables for which the farm is known.

Another founding member of COABC, 2002 marked the first year Mary was not on the Board of Directors. She was involved in the Canadian Organic Unity Project (COUP), which later turned into COAB. She has been an active member of the Standards Review Committee and the AGM Committee, but Mary's heart is with marketing and promotion. She is the most dedicated promoter of the Checkmark in the COABC.

Paddy Doherty (2002) has been an organic farmer since 1976, supporting his farming habit for many years by working for BC Rail. He is a partner in Dragon Mountain Farm, a 500-acre sheep ranch in the Cariboo. Paddy was a founder of the Cariboo Organic Producers Association, and involved in COABC since its inception. During his three-year

Presidency of the organization he developed the BC Organic Grower and engaged in endless policy work. He can take credit for creating a climate within the provincial government to foster the growth of the organic sector.

At the end of his term as President, COABC was able to hire Paddy to continue his policy work as Director of Certification Services. He has recently spent considerable energy in the development of the Canada Organic Initiative, bringing together leaders in organic sector to develop a regulation for organics in Canada.

It seems that the founding of an organization like COABC is a never-ending project. The founders' vision of a strong and healthy organic agriculture movement is being brought into reality by the continuous and generous efforts of the members of COABC. Through all the growth and changes, and the continuing commitment and involvement of most of the original creators of COABC keeps us grounded – and hopeful. ✓



  
Sunshine

  
Diva

  
Bright Lights

  
Baby Bear

Call Johnny's for:

- ① A FREE 2004 catalog.
- ② Experienced seed breeders, growers and merchants since 1973.
- ③ Award-winning vegetable, flower and herb seeds.
- ④ Certified organic seeds and supplies.

1-207-861-3902

Visit us on the web  
[www.johnnyseeds.com](http://www.johnnyseeds.com)

#50624



## Maude Island Farm

by Paddy Doherty

Farming on an island isn't easy; just ask farmers whose lives are scheduled around the arrival and departure of public ferries. What if there was no ferry – no electricity either? This scenario describes the farming experience on Maude Island on Skidegate Inlet; it isn't easy, but the rewards are worth it.

Linda Dixon and Laird Bateham (along with their three daughters) are the owners and operators of Maude Island Farm - located on the south shore of Maude Island. They are the only people living on Maude Island. Travel to the farm consists of a 20 minute boat ride from Queen Charlotte City; that is, if you have already completed the six hour ferry ride to the Queen Charlottes Islands.

While the rest of us need a truck or van and a gravelled drive to move our produce to market, Linda and Laird need a truck, a boat, a wharf and a dock. Every box of carrots must be carted from the garden to the jetty, down the ramp to the float and on to the boat, motored to the government dock in Queen Charlotte City, and loaded on to a truck to be taken to market.

Building and maintaining your own jetty and wharf in a stormy inlet with 24 feet of tide is not something most of us would relish; for Laird and Lynda it is part of the cost of being able to live and work in the most beautiful place in the world.

Maude Island Farm started as an idea more than 15 years ago. The property must have been homesteaded at some time, but was crown land when Lynda and Laird applied for an agricultural lease. They made a good case for developing an intensive market garden and greenhouse operation, and after jumping through many regulatory hoops, they were given the lease (it was a lease to purchase and they now own the property).

Since then they've cleared ten acres and planted 2.5 acres into market vegetables. "We have a captive market," Lynda says, "and we sell everything we grow." Carrots are their biggest crop. "The Haida love them!" Lynda confides. Along with carrots they grow a large amount of beets, and then a certain amount of just about every garden vegetable. "We can even sell all the zucchinis we grow", she adds.



Though Maude Island Farm is a rain-washed ocean frontage, the garden soil is high in organic matter. "Between 16 and 27 per cent," Lynda says. "But low in nitrogen." Obtaining inputs is a big problem on Maude Island Farm. They have no livestock

and can't bring any quantities of manure or compost across the inlet in the boat. "We tried burying fish heads in the garden to provide some nitrogen but the racoons dug them up. We used fish meal as a nitrogen source but a pair of ravens pulled up all our transplants to get at the fishmeal we used as a side dressing."

They do use seaweed but even with a half mile of beachfront they cannot get enough to meet their needs. Now they are using a crop rotation of Austrian peas and rye. Lynda and Laird

agree that organic farmers must rotate a portion of their farm every year through some kind of soil building program. "We cannot mine the soil until there is nothing left," Lynda says. "We want to stay here."



The mild climate allows Lynda and Laird to garden

throughout the year. Lynda enjoys being able to mulch asparagus or harvest cabbage in the winter but is quick to point out that, "...the weeds grow 12 months of the year." Aside from the ubiquitous weeds, the major pest on Maude Island Farm is slugs. "We don't know what to do about them," Lynda moans. "We keep a large sanitary row all around the garden, and we're

obsessive about weed control but we still haven't found a solution!"

Lynda and Laird have more plans for Maude Island Garden. They'd like to finish their new house, build a hydro system on the creek, and finish the massive aluminum greenhouse erected at the side of the garden. The financial plan for all this ambition is winning the set-for-life lottery, Lynda jokes. However, they have embarked on another income-producing venture.

With the help of close friends, in 2002, the Maude Island Healthy Living Society was formed. The Society promotes instructional retreats on Maude Island Farm for everything from organic cooking to massage therapy. Completion of a large shop/retreat centre on Maude Island Farm has made this venture possible. Use of the farm facilities for retreats provides some extra income for the family.

In 2002, the Governor General Adrienne Clarkson was visiting the Queen Charlottes and her staff asked Lynda if she might visit Maude

Island Farm – and have lunch, it turned out. It has been common knowledge that Adrienne Clarkson is supportive of organic farming (she is now the Patron of the Canadian Organic Growers) so Lynda was not surprised by this request.

"I was flattered and excited, but it was a ton of work," Lynda says. "When Adrienne Clarkson comes to visit it is not just her and John - there are always lots of others." Lynda served local salmon of course and the visit was reported by news coverage throughout BC.

Maude Island Farm was certified by the Cariboo Organic Producers Association for a few years. Now the cost of bringing a Verification Officer to the Queen Charlottes is more than one small farm can afford. Lynda and Laird are disappointed that they could not continue their certification – not so much because they need a certificate, but because they want to belong to the rest of the organic community. "We want to be certified like every-

*continued on page 18...*

### Liquid Fresh Fish Fertilizer

Organic 2-3-0

PACIFIC NATURAL BRAND

Pacific Natural is a cold processed, enzymatically digested fresh fish fertilizer produced from the Pacific dogfish at our plant in Delta, B.C. When applied to the soil, PN performs as a natural bio-stimulant, with the enzymes biologically unlocking nutrients contained in the soil. Because the natural oils and collagens have not been removed, our fertilizer does not leech out into the local water table, but remains in the soil providing a time-release effect. In addition to being a root-feeder, PN is suitable as a foliar spray and compost starter.

PN is completely natural, other than the addition of 3% phosphoric acid needed for pH stabilization. For application, it is mixed with water at a ratio of at least 10 parts water to 1 part PN in order to bring the pH level to neutral to initiate bio-activity. PN has been filtered through an 80-mesh screen and can be applied through conventional methods including aerial spraying and underground drip systems.

Application rate: 5-10 gallons of undiluted PN per acre (diluted at least 10:1, 3 times per year)

To place an order or for further information, please contact Michelle – Bella Coola Fisheries Ltd.  
Phone: 604-583-3474 Fax: 604-583-4940 Email: mvecchio@belcofish.com

...continued from page 17

one else," Lynda explains. "We don't want to be second-class."

"I'd like to grow flowers," Lynda says, "and hanging baskets if we ever get the greenhouse finished." Lynda admits that since she's become a farmer she's succumbed to that unrealistic but unending optimism characteristic of this class of people. "I don't know why, but every season I look forward to the back-breaking task ahead, no matter how fruitless and brutal the previous season was."

Perhaps it is the drudgery of watching the sea otters play while weeding carrots, or seeing porpoises or spring salmon jumping while dragging seaweed off the beach that inspires her. "I don't know what it is," Lynda confides, "but when the sun shines in the rainforest, there is no place more beautiful in the world."

For more information on Maude Island Farm, visit <<http://www.qcislands.net/maudeis/>>

## New Hops Growing Manual

BC was once famous for its hops, one particular variety of which gave a unique flavour to locally-made beers. A new publication is revitalizing this fascinating crop. *Small-Scale & Organic Hops Production* is a manual for growers, covering everything from soil management and trellising to packaging, including information on how to reach the burgeoning craft brewer market. The manual was created with assistance from the Investment Agriculture Foundation, and is intended to help small-scale farmers diversify, while meeting the growing demand for local and organic hops from BC breweries. Hops are a quick starter with long-term potential, and promise excellent returns per acre.

Certified organic hops rhizomes (9 varieties) as well as the manual are available from Rebecca Kneen. Ph (250) 675-4122, fax (250) 675-6849 email <[gae@ramshorn.bc.ca](mailto:gae@ramshorn.bc.ca)>

## A Promising Molluscicide: Iron phosphate by Brian Baker

Slugs and snails, commonly referred to as molluscs as they belong to the *Mollusca* phylum, cause widespread problems in organic agriculture. Mollusc damage decreases crop yields and lowers product quality. In some cases, molluscs may also serve as an intermediate host for human and animal parasites, particularly in tropical regions. While a number of cultural and biological practices can help reduce mollusc damage, certain organic practices such as growing green manures and mulching may make the problem worse. Predators can be used to control slugs and snails, but in some regions these would be exotic introductions and therefore not allowed because they could be a threat to the native biodiversity. Coffee and beer are used to repel or trap molluscs with limited success. Metaldehyde has sometimes been used as a molluscicide in organic production, but it is not generally accepted, and is being phased out as a permitted input in the European Union organic regulations.

Iron phosphate in the form of ferric phosphate, or iron (III) phosphate, offers a potential means of controlling slugs and snails. The product is naturally occurring but can also be synthesized. Its environmental impact can be characterized as mixed, although it is safe enough to be used as a nutrient supplement for both animals and humans. Iron phosphate is generally not toxic in soils under most situations, and accumulation is unlikely to create a problem at the recommended application rates. Much of the commercial stock is obtained from recycled sources.

The mode of action is still not entirely understood, but researchers believe that iron phosphate toxicity to molluscs is based on a feeding inhibition, immobilization, or alteration of behaviour. Studies found iron phosphate non-toxic to humans and a wide range of non-target organisms. Because it is commonly used as a livestock feed additive, iron phosphate appears to pose minimal risks to animals kept on the farm, even if accidentally ingested.

Consumer risk is negligible because the compound is applied to the soil surface as pellets or granules with a bait, and is not intentionally applied directly to the food. However, ferric phosphate is considered safe enough not to be a food safety hazard to humans even if ingested.

As with other pesticides already permitted in organic production, the inert ingredients used in the formulation might be a greater concern. Chelating agents may be used in the non-active portion of the formulation to enhance the molluscicide's efficacy. A survey of the efficacy literature and patents for iron-based molluscicide formulations indicate that such products may contain ethylene diamine tetraacetic acid (EDTA), butan, octan, or some other chelating agent to make the iron more biologically active.



Such substances are often non-biodegradable and may be more toxic to humans and other non-target organisms than the iron phosphate itself.

Iron-based molluscicides appear to be a promising development for a problem faced by organic farmers worldwide. After an expert review of a dossier submitted to IFOAM, the IFOAM Standards Committee concluded that ferric phosphate meets the IFOAM criteria for inputs and a recommendation has been sent to the membership to vote to add iron (III) phosphate to Appendix II of the IFOAM Basic Standards.

Currently, the EU allows iron (III) phosphate to be used as a molluscicide in organic production, and Codex Alimentarius is considering its addition to its organic guidelines.

The USDA's National Organic Standards Board has a petition pending on the substance.

Reprinted with permission from "Ecology and Farming", IFOAM, Charles-de-Gaulle Strasse 5 D-53113, Bonn, Germany. Brian Baker PhD is Research Director, Organic Materials Review Institute, Eugene, OR, USA <[www.omri.org](http://www.omri.org)> email: [bb@omri.org](mailto:bb@omri.org)

**GRIFFIN LABORATORIES CORP.**  
Soil, Feed & Plant  
Tissue Analysis

250.765.1899 • Fax: 250.765.8556  
1-800-461-2399

2551A and B, Kelowna, BC V1Y 7L4

**Organic Land Care**  
Working with Nature

Gain the knowledge, ability and confidence to make effective organic land management decisions.

Comprehensive education in organic horticulture is now available to anyone, anywhere, anytime.

For information and registration, visit our website at:

[www.organic-land-care.com](http://www.organic-land-care.com)

Brought to you by Gaia College Inc.

**PACS**  
Professional Accredited Certification Services

**Certified Organic**

**Pacific Agricultural Certification Society**

#8-A 100 Kalamalka Lk. Rd. Vernon BC  
Tel: 250-558-7927 Fax: 250-558-7947  
email: [PACS@junction.net](mailto:PACS@junction.net)

[www.certifiedorganic.bc.ca/CA/pacs\\_list.asp](http://www.certifiedorganic.bc.ca/CA/pacs_list.asp)



**BSE**  
*Are you concerned?*

**Feel Safe with Organic Beef!**

Organic beef producers use no animal by-products, hormones, antibiotics, GMO feeds or chemical fertilizers. Jerseyland Organics offers a full line of Certified Organic beef.

We run a herd of Angus beef cattle. These cattle are pasture raised on private lands – we do not range on native grasslands as this compromises native species' food sources.

Further, our beef is available as only grassfed, or if preferred, finished on organic grain.

We will do whole sides, freezer packs or individual cuts. Delivery available throughout Southern BC and Vancouver area.

All beef is raised in accordance with COABC standards.

Please contact us for prices and availability.

[www.jerseylandorganics.com](http://www.jerseylandorganics.com)

**Jerseyland Organics**

Box 1468 • 2690 Almond Gardens Road  
Grand Forks BC V0H 1A3  
Ph: (250) 442-8112 • Fax: (250) 442-6737  
Farms: (250) 442-6683  
email: [jrtyltd@sunfireable.com](mailto:jrtyltd@sunfireable.com)

## Egg Struggle Continues

COABC is part of a coalition of organic distributors, retailers, and others to negotiate an agreement with the BC supply-managed marketing boards that will accommodate the needs of the organic sector. Organic producers of the relevant products (eggs, chicken, turkeys and milk) will soon receive a questionnaire, on the basis of which the coalition will develop proposals that reflect their opinions and positions.

Meanwhile, the egg and chicken boards have taken actions which have led a group of producers and their supporters to demand that organic producers be simply exempt from the jurisdiction of the Boards.

In particular, people are outraged at the levies and fines imposed on Fred Reid's Olera Farms. As a result of the Board's actions, Fred has been forced to quit the egg business. His brother Brad Reid is facing similar treatment from the chicken board, although payment of the fines has been postponed by the courts.

The basic question at issue is whether or not Certified Organic products are distinct and not inter-changeable with conventionally-produced eggs, chicken, etc. Organic producers have developed their own markets with no assistance from the boards, and are unwilling to pay levies for which they receive no services and which will go to support production systems, such as caged laying hens, which they consider to be immoral.

For more information, background, and post-cards to send to the relevant authorities, visit <[www.organics.bc.ca](http://www.organics.bc.ca)>



Look to us for:

- greenhouses, shade and rain frames
- roof vents, fans, shutters
- roll up hardware, motors and cranks
- poly, lock, polycarbonate, shade cloth
- benches, ground cover and more

Download our new catalogue!

**Steele Greenhouse Components**  
Tel: (604) 532-1817 Fax: (604) 532-7742  
[www.steelgc.com](http://www.steelgc.com) email: [steelc@axionet.com](mailto:steelc@axionet.com)

## Audit Trails *by Tracy Lundberg-Schimpf*

In March, 2003 the board of directors of NOOA initiated a project with funding from their association, the BC MAFF, the OSDP, and contributions from NOOA members. A draft tracking system was developed with input from various organic and conventional farmers as well as industry by July of 2003. A report was published in January, 2004.

Traceability is the new buzz word in agriculture. Mad cows, botulism and bioterrorism have created a huge demand for traceability in our food system.

It gives customers confidence that, should anything go wrong, the entire history of that product is readily available. It also provides protection for the farmer should any complaint be brought to their own door.

Even though most farmers know where their products came from and what was done to them, the current expectation is that the farmer can prove that knowledge and history with some type of documentation. A paper trail has always been a requirement of organic certification.

Tracking systems serve as an easily accessible tool for the farmer to mark their own progress or to source any detail about their product without digging through mountains of paper. Memory is a wonderful thing until you lose it.

The report details a simple tracking system that can be implemented on any small to medium-size farm. Whether you prefer a manual, hand-written system or computerized spreadsheets, once set up, the process should only take 10-15 minutes of updating every few days. Personal digital assistants (PDAs) can move the tracking process right into the field.

Documented tracking is no longer a requirement unique to the organic community. Conventional agriculture is now under pressure to develop similar systems relating to traceability. Make sure your farm is ready and able to answer any inquiry.

# Aquaculture

by Lee McFadyen

*These concerns were raised during the Aquaculture workshop at the AGM this year. If you have an interest or concern regarding this please investigate the websites listed.*

## **How can organic standards prevent disease/parasite transfer to wild stocks?**

The current draft standards disallow the use of antibiotics in production stock. This requires that producers observe very stringent health management protocol, since a disease outbreak and the group treatment required would result in decertification of the stock. Under such a regime it is likely that wild stocks pose more of a threat to farmed fish than vice-versa.

Standards are only being developed for Pacific salmon, which are naturally less susceptible to sea lice than are Atlantic salmon. The BC farmers currently seeking certification attribute their lack of problems with sea lice to a combination of low stocking densities, farm siting, and the natural resistance of the species that they culture. The draft standards require a sea lice monitoring regime, with specified action levels. The Caligus website provides access to past and current research on sea lice management (<http://www.ecoserve.ie/projects/sealice/caligus2.html>)

Density is a critical factor in sustainable aquaculture, and is restricted under the current draft. Lower densities will reduce stress levels and susceptibility to disease. Density dependent disease and parasite transmission will also be reduced.

## **Shouldn't we worry about releasing fish waste into the ocean?**

If waste refers to fecal matter, one must question the wisdom of this proposition – as much as a farmer would question the wisdom of dumping all of his manure into the sea so as to prevent nutrient enrichment of the land. Nutrient inputs from fish farms are generally not thought to contribute to harmful algal blooms unless the farm is poorly sited in an area of low water circulation. The question, then, is whether the volume of fecal waste generated is within the assimilative capacity of local ecosystem processes. Low stocking densities, siting requirements for minimum current flow, and benthic monitoring, as outlined in the draft standards, can provide safeguards to ensure that overloading of the system does not occur.

## **Can fish feed be 100% organic?**

The fundamental requirement of organic livestock feed management is to provide a complete, balanced ration that closely conforms to the organism's natural dietary preference while remaining exclusively composed of allowable materials. Fish meal and oil used in livestock feed are derived primarily from wild-capture systems, which generally cannot be organically certified. Since there is currently no permissible alternative to including appropriate amounts of fish meal and fish oil in the diets of piscivorous fish, organic standards-setting committees have focused on ensuring the sustainability of the marine resources from which it is derived. The current draft standards require that fish meal and oil be derived from the by-products of the sustainably managed, local herring fishery. Use of local product provides an excellent means of recycling nutrients without relying on international trade in fishmeal or contributing to pressures on foreign fisheries.

In the long term, there may be potential for rearing fish and invertebrates in certified organic systems as feed sources as well.

## **Shouldn't we be worried about contaminants in the marine environment?**

Fish don't eat water, they breathe it. Fish from farms operated in relatively pristine areas are

probably exposed to less pollution than are most farms near urban centers.

## **Aren't farmed salmon contaminated with PCBs?**

Persistent organochlorine contaminants are ubiquitous in the environment and bioaccumulate in animal tissues. They are found, in trace amounts, in both wild and farmed animals.

Organic standards certify the production process, not the product. Nonetheless, in recognition of the concerns regarding PCB contamination in farmed fish, the standards will be structured so as to ensure a safe, healthy and sustainable product

## **Why are farmed fish fed substances to enhance their colour?**

The reddish-pink colour of wild salmon flesh is due to the presence of a carotenoid pigment called astaxanthin. This naturally occurring pigment is derived from marine algae. The algae are consumed by crustaceans which, in turn, form an important part of a wild salmon's diet. Research suggests that astaxanthin fulfills a number of essential biological functions for salmon, influencing reproduction, vision, immune response, and protection against oxidation of essential polyunsaturated fatty acids. As such, it is necessary to ensure that farmed salmon receive appropriate amounts of this carotenoid in their diet (<http://www.salmonna-tion.com/tour/roche.pdf>).

Conventional salmon farming operations include astaxanthin as a dietary supplement in the feed, both to promote optimal fish health and to ensure that the flesh colour is palatable to consumers. Astaxanthin can be manufactured by chemical synthesis in much the same way vitamins are produced for human consumption. Because organic production standards usually prefer natural over synthesized materials as supplements, natural sources of astaxanthin have been required in the draft organic salmon standards. Astaxanthin, found naturally in the yeast *Phaffia rhodozyma* and the microalgae *Haematococcus pluvialis*, is commercially available. Alternately, the use of shrimp shell as a by-product from wild-caught or certified farmed shellfish processing may be used for natural pigmentation.

## **Don't some First Nations oppose salmon farms in their traditional territories?**

The draft standards require consultation and written approval from local First Nations for any salmon farm in their traditional territories wishing to seek organic certification.

*Other, more philosophical, questions included: Is it ethically acceptable to certify the production of higher trophic level species? Should raising a migratory species be allowed (farmed salmon are harvested before spawning, which is the only time the migratory instinct is strong)? How is this reflected in current COABC standards?*

## **Should only landlocked salmon be certifiable?**

One of the primary factors influencing the environmental interactions of net-pen salmon aquaculture is siting. Clearly, certain locations are more appropriate for siting salmon farms than others. Areas with high current flow can ensure that waste does not build up on the benthos, and also reduce sea lice levels. Locating farms away from sensitive areas such as eel grass beds and salmon streams is equally important. Unfortunately, many of BC's salmon farm tenures were created prior to the development of stringent siting criteria. Many of these farms are currently queued for relocation.

Certified organic salmon farms would be required to conform to specific siting criteria, based on the new provincial criteria ([http://www.agf.gov.bc.ca/fisheries/Finfish/Provincial\\_Siting\\_Criteria\\_March\\_2000.pdf](http://www.agf.gov.bc.ca/fisheries/Finfish/Provincial_Siting_Criteria_March_2000.pdf)).



*The Aquaculture Working Group is faced with a difficult task in working through these complex issues before they can decide whether or not to*

*recommend an aquaculture standard to the Board of Directors. Input from the organic farming community, either through BCOG, the on-line forum, or directly (Lee McFadyen, 250-499-5404, <mariposaorgf@hotmail.com>) would be very welcome. Please take the time to become familiar with this important issue (the COABC aquaculture site is an excellent place to begin!) and contribute your perspectives.* ✓

## Across the Creek Organics



**Organic Seed Potatoes**  
**Fresh weekly Harvest Boxes**  
Pemberton BC

info@acrossthecreekorganics.com  
www.acrossthecreekorganics.com  
Ph. 604-894-6463

## The Threat of Privatized Seeds

by Jerry Bremer

In the last decade the organic movement has seen positive stable growth of approximately 15% annually, mainly in production. Organic seed stock growers have grown approximately 2% annually.

Also in the last decade seeds have become vulnerable to human prey. We are seeing the conglomeration of seed knowledge, and genetic material becoming private property. Patent law is being used to assert intellectual property rights of multinationals and deny farmers' right to save seed (eg. Monsanto vs. Percy Schmeiser). We as organic farmers must protect our seed stocks in the Public Domain, for all to access for free.

Along with losing germplasm to private ownership for profit there is consolidation in seed markets, and varieties that don't meet the global market standards are being removed from

the market place completely. As a result, organic family farms and small scale producers are challenged with fewer varieties to meet their conditions. Seed that has been grown for resistance to disease is based on chemical application, thus for organic growers us crop failure is bound to occur.

Seed research and replicated trials addressing issues specific to organic agriculture are not being carried out by the research institutions. It is left to people like Frank Morton to undertake organic seed breeding which, as he says, is "really breeding for the whole farm ecology, developing seed that increases the positive interactions of farm ecosystems". This is the approach we need to take as we move from seed saving to seed breeding in B.C. ✓

## Farm~Aid

Woodpecker Ranch is a beautiful 80 acre mixed farm located 30 miles south of Prince George. We have plans underway for a retreat and learning centre where we will host workshops on a variety of topics such as sustainable living, using alternative energy, rare breed conservancy, organic growing and healthy living.

We are looking for a responsible farm couple or individual to work for about 5-6 hours per day (M-F) caring for animals and working in the 80 x 25 greenhouse. You'll receive free room and board in your own rustic cabin and a small stipend.

If you are interested in this opportunity, please contact Bart Craig or Lorna Medda.

### WOODPECKER RANCH

6395 Camp Creek Road  
Prince George, BC V2N 5Z6  
Phone: 250-330-4255  
Fax: 250-330-4256  
E-mail: bartjcraig@telus.net

## Deer Damage a Problem?



Benner's has the  
Permanent Solution...

Virtually Invisi-ble  
**Deer Fencing**

• Affordable • Easy to Install

1-800-753-4660

www.BennersGardens.com



Now Distributing in BC!

## Plant Improvement for Organic Seed Growers

by Patrick Steiner

From November 21-23, 2003 at UBC Farm in Vancouver a group of 25 growers gathered for an intensive three day workshop led by Dr. John Navazio of the Organic Seed Alliance in Port Townsend, WA. John has a Ph.D. in plant breeding as well as extensive experience working in the seed growing industry over the past fifteen years. That experience and knowledge was the basis for a tremendous amount of information shared with our group over the weekend. By Sunday evening it was clear that each participant had been deeply inspired to make seed-saving an important part of their farm's production.



Patrick Steiner holding *Gardener's Delight* tomatoes, one of *Stellar Seeds'* most prized varieties.

On the first morning of the workshop John painted the larger context in which organic seed production currently operates. Today, five transnational companies control 75% of vegetable seed varieties. Seminis alone controls 40% of North American varieties. In 2002 they dropped 2000+ varieties. John felt the role of the independent seed company was to fill in the gaps by growing, and working with other growers to produce: specialty varieties, workhorse varieties, varieties for organic production.

There is an important link between farmers and local seed companies that must be re-established where farmers produce and select seed for local or regional use. The aim of November's workshop was to introduce growers who have not produced seed, but have growing experience, to the concepts and information needed to grow quality seed. Indeed the course went one step further, providing participants with the information to improve existing varieties for their particular needs (ie organics, early maturation, bolt tolerance, etc.).

Needless to say, the workshop was a crash course on genetics and plant breeding, concepts that John insisted were crucial to the farmer's ability to grow good seed crops. While this kind of scientific information might seem

daunting, John made the concepts accessible and fun, and I think all the course participants were very excited about applying this new understanding of crops to their own farms – it

simply gives growers another tool with which to view the outcomes of their own work.

The crucial difference between self-pollinating crops and cross-pollinating crops is one example of this kind of information.

Chris Wells, one of the workshop participants, has written an excellent article

summarizing these differences. Check it out at <<http://www.certifiedorganic.bc.ca/rcbtoa/training/seedsaving.htm>>.

While many of us can grow a wide array of crops to seed on our farms, there are reasons to choose carefully what you grow to maximize quality and minimize problems. John conveyed the importance of determining "Which Seed Crops are Right For You". Several factors need to be considered. Start by examining the environment you farm in – there are appropriate seed crops for appropriate environments, and appropriate seed crops for appropriate people.

Consider the ecoregion you farm in. Do you have hot or cool summers, dry or wet autumns (when seed needs to mature and dry down). These factors will play a role in helping you decide an appropriate crop for seed-saving. Seed crops that are in pods such as the legumes or brassicas are better protected from disease in wet weather, while seed crops with exposed florettes like the alliums, composites, or umbel families might be more appropriate to a dry harvest climate. Consider whether the crop you will save is cross-pollinating or self-pollinating. This will determine how you manage the crop, what numbers you will have to grow, how much space you use, what isolation

continued on page 26...

... continued from page 25

distance is required, and most importantly how much time you will spend doing selection on the crop. Consider the seed cleaning requirements of the crop you choose. This will also determine how much time you spend and what special materials you will need to help clean the seed. Consider what you will use the seed for. Is it for own use? For sale? Can you market the seed, or will you need help? Most importantly, make sure you choose a crop you enjoy growing and have some familiarity with. In focussing the seed growing and selection process, an eye for what the ideal vegetable type looks like is your best guide.

## A Great Opportunity

by Linda Edwards

Many people became involved with the Soil Health Assessment project with a feeling it was not going to be really worthwhile. Others came thinking they understood what their soils problems were; and some were pretty sure they had none. All of us were wrong. The results of this project have had and will continue to have a very big impact on soils and crop nutrition management for all of us who were involved.

The greatest strength of the project was that it surveyed many sites, since one grower's soil test by itself tells you little. Records, going back years on some sites, and sampling of soils in the area that had never been irrigated or cultivated were also immensely valuable. As you will see in Julia Wagner's report, one nagging myth was dispelled. This was that tillage reduces organic matter. Those of us who regularly use tillage in our tree rows or in cultivating land for ground crops now know that we are more than compensating for any breakdown with additions of compost and green manure crops. Ongoing monitoring of organic matter using the benchmark plots established in this project will enable us to continue to ensure that organic matter breakdown is balanced by additions.

Less comforting was the finding that our zinc, phosphorus, potassium and boron levels are increasing over-all and are well above native levels. While we are not sure about the implications of the high levels in the first three, the

John Navazio will be back in BC for a two-day intensive workshop on seed production in July. The course will take place Tue, July 6th - Wed, July 7th. This workshop will be held in Sorrento (near Salmon Arm) and includes two full days of instruction and field visits to two area farms growing organic seed crops.

For more information or to register, contact Patrick Steiner at 250-804-0122, or email me at [agave@telus.net](mailto:agave@telus.net). Thanks to support from the Organic Sector Development Program and Investment Agriculture Foundation for partial funding of this workshop.



boron levels are alarming. This is a micronutrient that is essential but can become toxic at very low levels. Tree fruit growers immediately thought that the one foliar spray of boron they apply each year was the culprit. They do this because their leaf tissue analysis frequently show boron deficiencies. However, there was one grower with ground crops who have never applied boron in any form who also had relatively high levels. One clue that we have to what might be causing this is in one of the scientific articles reviewed in Science Notes in the previous issue of the BCOG. That article described how increasing amounts of organic matter in the soil adsorb boron and make it unavailable for plants. This would result in increasing amounts in soils tests. Several of the farms involved in the project are reevaluating compost application programs – maybe it is time to cut back. On our farm we have switched from chicken to cattle manure this year. The cattle manure has lower levels of phosphorus for one thing. The compost tea trials planned for this summer may also provide us with some alternatives. More research is needed. Plans are underway to select one of the identified concerns and to continue working together to find out more about it.

To participate in a project such as this done on a regional basis is immensely valuable. All of us in the Similkameen who did recommend it highly.



## Soil Health Assessment in Organic Farming Systems

by Julia Wagner

How do you evaluate the health of your soil? Have you ever asked yourself: Can I change the health of my soil or do I just accept what I've got? Or, am I maintaining the soil I do have? Am I putting in more than I'm taking out? What about the net effect of management practices: What is the effect of my tillage practices on soil organic matter? Do I really need compost? Or, how much compost should I apply?

The Soil Health Assessment in Organic Farming Systems project has been asking these questions in a pilot project with a group of 15 to 20 organic producers in the Similkameen Valley, as well as a number of local resource people (field consultants, the provincial soil specialist, and research scientists).

A full-day workshop, interviews and a field day with participating producers and local resource people, complemented by my review of the rele-

vant soil health literature, led to the development of a proposal for a soil health assessment strategy. Trials of this assessment were conducted on 24 plots on 15 farms between August to October 2004. All of the plots were fruit tree plots except for 2 ground crop plots and 2 tree fruit replant plots (currently in ground crops). As much as possible, the producers themselves were actively involved in the assessment process.

### Benchmark Sampling

To ensure a meaningful evaluation of soil health we adopted a benchmark sampling approach, selecting a 'benchmark area' that is representative of a certain soil type and management system and sampling this same area each time. This approach is intended to

better monitor change over time by minimizing sampling error and differences in results due to soil spatial variability. The benchmark plots established for the trials in the Similkameen Valley were approximately 1,000m<sup>2</sup> (1/4 acre or 1/10 ha), square or rectangular in shape.

### Three Key Aspects of the Soil Health Assessment in Organic Farming Systems project

- Assessing soil health on individual farms using some set of chemical, physical and biological indicators of soil health
- Bioregionally adapted approach to soil health assessment: farms in a given region use a common set of soil health indicators that are selected for their relevance to that particular region's soils and production systems
- Collaborative approach between growers and local resource people to assess soil health and identify and address soil management issues.

Table 1

| Soil Indicators                                  | Chemical  | Biological   | Non-Soil Indicators |
|--|---|--|---------------------|
| Texture  | Soil Organic Matter (Organic N & C)                 | Microbial biomass  | Water Quality       |
| Depth of soil, topsoil and rooting               | pH  | C & N  | Air Quality         |
| Water infiltration                               | Electrical Conductivity                             | Potentially Mineralizable N  | Crop Health         |
| Water holding capacity                           | Cation Exchange Capacity (CEC)                      | Soil respiration   | Other plant growth  |
| Bulk density                                     | Major elements (Extractable N, P, K, Mg, Ca, Na, S) | Soil enzyme activities   | Animal Health       |
| Soil structure & Aggregation (or Soil tilth)     | Micronutrients (B, Cu, Fe, Mn, Zn)                  | Soil biodiversity  |                     |
| Porosity   | Heavy metals  | Food web structure (including microbial community structure and soil invertebrates, and soil nematodes and earthworms) |                     |
| Compaction: bulk density, penetration resistance | Organic chemical contaminants                       | Root disease   |                     |

### Common Set of Indicators

Indicators are soil attributes that can be measured or otherwise evaluated to determine how well the soil can perform crop production or environmental functions and how these functions are being affected by management practices. (see Table 1)

continued on page 28...

...continued from page 27

These indicators vary in terms of their accessibility to producers, affordability (including equipment and time requirements), and types of skills and knowledge necessary for assessment or results interpretation. The soil health assessment proposed for the Similkameen Valley relied primarily on biological and physical indicators that could be assessed on-farm, and chemical indicators assessed using the readily available standard laboratory soil analysis. (see Box 2)

At the start of the project, all growers had performed laboratory soil tests but many had found the results of limited use in understanding soil health. Therefore, including the soil test and ensuring consistent sampling methods among growers also provided the opportunity to assess its utility as one tool in the soil health assessment toolbox.

An earthworm count was the primary biological indicator included in the Similkameen Valley assessment because of the ease and low cost of this method, and the relatively substantial body of knowledge about earthworms' contributions to soil health. Biological indicators tend to require complex methodologies, often laboratory-based, and/or lack an adequate research base to interpret results for management decisions. While development of biological indicators was outside the scope of the Soil Health Assessment in Organic Farming Systems project, organic producers may want to consider initiating specific research on biological indicators for their region and farming system in cooperation with local researchers and stu-

#### Box 2.

##### Components of Similkameen Valley soil health assessment

- A) *Baseline Assessments – Assess One Time Only: Stable properties, do not change significantly over time*
1. Rooting Medium Depth - depth to any restricting layers
  2. Depth to Free Lime - soil reaction with hydrochloric acid
  3. Coarse Fragment Content - estimated % of rocks in 15cm x 15cm hole to 30cm depth
  4. Soil Texture - hand texturing with a key
  5. Subsurface soil test (15-30cm) - see lab. soil analysis below
- B) *On-farm Soil Assessments – Monitor Annually: Dynamic properties, can change with management practices*
1. Structure descriptions (Soil tilth) - using a visual assessment key
  2. Compaction - Dickey John compaction tester
  3. Water Infiltration - producer's observations
  4. Earthworm Count - hand counted from 15cm x 15cm hole to 30cm depth
- C) *Crop Health & Other Vegetation Observations*
1. Crop Quality: Size, Colour, Taste and Storage
  2. Crop Yield
  3. Fruit Tree Vigour
  4. Weeds
  5. Cover Crops or Green Manure or Orchard Floor Vegetation
- D) *Laboratory Soil Analysis (Surface 0-15cm)*
- pH
  - Electrical Conductivity (E.C. - salts)
  - Extractable Nutrients: P, K, Mg, Ca, Na, SO4-S
  - Micronutrients: B, Zn, Fe, Cu, Mn E
- Other Recommended Assessments*
- Tissue Analysis (Leaf and Fruitlet for tree fruit)
  - Compost Analysis
  - Water Analysis

dents. For example, a group of Similkameen Valley producers are now initiating a research project to investigate the effect of compost tea and soil biological activity in their orchards using the Soil Foodweb analysis approach.

#### Collective Approach

The project is based on the premise that our understanding of and capacity for managing soil health can be improved by integrating different ways of knowing about soil health from farmers' direct experience of working the soil, to field consultants' overview of soil issues across farms, to scientists' knowledge of soil formation principles and specific research results.

The results of the our trials of soil health assessment were compiled to compare individual benchmark plot results and identify common

issues. At a recent workshop, producers were able to discuss specific management practices that might be influencing results on their farms, and the two research scientists present were able to contribute their interpretations of the results based on their knowledge of previous research. The discussion also offered the opportunity to identify future research priorities.

#### Some of the findings

- Organic matter levels in or greater than the range expected for soils of the semi-arid region, based on comparison to native soil sample tests and the local soil survey report.
- Relatively high electrical conductivity (E.C., a measure of salts) levels: to be monitored for further increases.
- High phosphorus (P) and potassium (K) levels: likely associated with repeated use of poultry manure compost (or fish pellets with relatively high P and K analyses).
- High levels of boron (B) and zinc (Zn): further investigation recommended to evaluate plant uptake and future micronutrient spray application rates.
- Identification of a compacted soil layer in the crop rooting zone of many plots: further investigation of its causes, extent and impacts on crop health recommended.
- Confirmation that earthworms are found in the Valley, their presence or absence in plots influenced by factors such as irrigation type, use of mulches (black plastic vs. woodchip), recent cultivation and availability of food sources (e.g. organic matter).

#### Evaluation

The data collected in this trial provided a snapshot of soil health indicators. The full value of the process is expected to come from on-going assessments over time to enable monitoring of trends. Monitoring trends should contribute to producers' capacity for more proactive, adaptive management - to avoid crises (e.g. toxicities or deficiencies of nutrients) or to optimize input use efficiency.

This type of collaborative soil health assessment provides an opportunity for organic farmers to be leaders in British Columbia, learning more about your soil to optimize farm management and environmental stewardship; pooling resources and building local capacity to identify and address farm management and resource management issues at a regional level; contributing to our collective understanding of soil health with producers, scientists and other resource people working together and sharing different types of knowledge about soil health.

At the final workshop there was a general consensus that the process should be carried on, and more research should be initiated on some of the specific issues that were identified. The need for someone to coordinate on-going efforts was emphasized: some of the young Similkameen Valley producers were thrown this torch, with support offered by their elders as well as by the participating researchers.

As research facilitator, my next steps are to draw from the lessons of the Similkameen Valley pilot project to make recommendations to guide producers in other communities to implement similar soil health assessment strategies. I will also pursue the Similkameen Valley participants' suggestions for development of resource materials to facilitate soil health assessments: a webpage to disseminate results, development of a soil test interpretation guide, and a handbook of soil health assessment methods.

For more information or to share your reflections on the relevance of this project for your farm and region, please contact Julia Wagner, M.Sc. candidate, Faculty of Agricultural Sciences, UBC at [jwagner@shaw.ca](mailto:jwagner@shaw.ca).



**SP BUSINESS SERVICES**  
has been providing comprehensive bookkeeping & administrative support to Organic Growers, fruit stands and packing houses in the Cawston-Keremeos area since 1994. We provide Financial Statements to month-end & handle all payroll and remittances, accounts receivable & collection, payables, and correspondence. We track product sales by grower for audit purposes as well as inputs for certification requirements.

Office hours: 8:30 – 4:30 Monday through Friday  
Owner/Manager: Sharyn Pollitt  
Ph: (250) 499-7887 • FAX: (250) 499-7889

**Ultra-Kelp™**  
100% natural organic seaweed fertilizer & animal supplements.

Kelp meal, liquid concentrate, & water soluble extract  
OMRI Listed • We ship everywhere!

Flack's Bakerview Kelp Products Inc. (est. 1985) Pritchard, B.C. **Toll free: 1-888-357-0011**  
**local: (250)577-3779**  
**fax: (250)577-3719**

## Classifieds

**EDIBLE LANDSCAPE PLANTS** – Exotic and garden variety organically grown plants. Many can be mailed. For catalogue: edible\_landscapes@sunshine.net, or c/o Robin Wheeler, 1732 Pell Road, Roberts Creek, BC, V0N 2W1, (604) 885-4505

**GROWING SEEDS FOR ORGANICS** – Two day intensive workshop with Dr. John Navazio of Organic Seed Alliance. Workshop includes preparatory reading material, two days of instruction, accomodation and food, field trip to area farms producing seed. July 6-7 (Tue. & Wed.), Sorrento Centre, Sorrento, BC. For more information or to register contact Patrick Steiner at 250-804-0122 or email agave@telus.net

**QUALITY HAY FOR SALE** – 1st and 2nd cut certified organic. \$6.50/bale, 60lb. Call Inge Thielemann at (604) 541-0344

**HOPS RHIZOMES & MANUAL** – Certified organic hops rhizomes available: Fuggles, Nugget, Goldings, Willamette, Mt Hood, Cascade, Centennial, Bullion. \$5 each plus shipping (bulk discount avail.). Manual on small-scale organic hops production free with rhizomes, \$5 without. Contact Rebecca Kneen, (250) 675-4122 or email gael@ramshorn.bc.ca

**POTATO PLANTER FOR SALE** - plant 2 acres an hour. A Lockwood 2-row potato planter, with fertilizer attachment, rubber tires and double picks for sale. With hydraulic cylinder and hoses \$1000, without cylinder \$800. Contact Rob at 250-5463669 or email: hettler@sunwave.net

## WJ Boughen & Sons

### Fruit and Specimen Trees

www.wjboughen.org

6764 - 224th St. Langley B.C. Canada  
Phone (604) 888-1284  
Fax (604) 888-1890  
email: grower@wjboughen.org



Letters to the Editor

Dear Editor,

Sometimes I feel like the Vietnam War era cartoon character Pogo when he reported, "I have seen the enemy and he is us!". The current direction towards claiming ownership of some of the words of the English language, words such as 'organic', is not only Orwellian, couched as it is in concerns about certain less than noble commercial interests exploiting the general public's trust of these words, it is downright hypocritical.

Perhaps a single anecdote (I have many) will serve to help illustrate my point which can hardly be properly addressed in 300 words: In the course of marketing my produce I have on occasion run into a man who owns a machine which is supposed to measure toxic residues in produce. His complaint is that his machine keeps finding residues sometimes in high levels in "Certified Organic Produce".

Without arguing about the accuracy of the machine I explain to him that in spite of what he may have heard "Certified Organic" does not necessarily mean unsprayed and in fact "Certified Organic" farmers are allowed to spray certain substances labelled as poison, with the "Skull and Crossbones" logo on the package, produced by several of the infamous agro-chemical companies etc. i.e. according to the common usage, toxic chemicals.

I come from a long line of thousands of years of organic farmers who did not use these substances and certainly never prophylactically on the basis of such specious evidence as valley wide spore alerts! Orwell again: What is the English translation of the Newspeak word "regulated"? In the dialect of Newspeak used in Book 2 of the COABC Certified Organic Management Standards the answer is evidently "Carte blanche, use as desired".

Speaking as a member of the aforesaid culture of organic farmers I have to ask "Who is appropriating what from whom?"

For now consider me a dissenter.

Sincerely,  
Michael Welsh  
Naramata, BC

Dear Editor,

We are one of the low income farms that are certified organic. Our certification began in 1997 simply as a marketing tool for our herb crops.

Since that time, after being involved with other organic farmers, gaining a better understanding of what organic means and seeing the hundreds/thousands of hours of volunteer work that goes into these organizations, we are now firmly committed to the entire process and system. The fees have never seemed excessive to us and remain one of the lowest inputs on our farm if we consider all that we gain from it.

What are the benefits to us?

- Contact with other farmers who have been wonderful at sharing their experiences with us.
- A valuable marketing tool for our crop into niche markets.
- An understanding of potential markets that we had not previously considered.
- Expansion of our little world into areas that we never would have thought of with information and discussion that keep our brains functioning.

## Certified Organic Composts for sale

Langley, BC

Available on farm by appointment or delivered



Organic Chicken Compost  
Organic Chicken and Pig Compost  
Custom Top Soil available

- bulk loads 30 yard or more \$19.99 per yard + trucking
- pick up from farm 24.99 per yard loaded
- 2 yard load delivered in the lower mainland placed anywhere on your yard. \$200.00

Also available for retail sales:

Thomas Reid Farms certified organic chicken  
Olera Farms certified organic raspberries IQF  
Donnachaidh certified organic pork

Brad Reid 604-308-8200  
Fred Reid 604-309-6639



Letters to the Editor

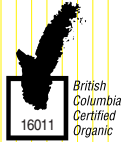
- A better appreciation of the land we live on and an expanded view of all that can impact us.
- The opportunity to volunteer with people that astound us with their dedication and knowledge. what will be required. It allowed us to perfect our processes and we have allocated the past certification costs for the processing as part of our development costs.

We would like to make our living full time from the farm and the only way we will be able to do that is to move into on-farm processing. We need a certification body that will open ALL markets to us should we move ahead. It is preferable to us that body is BC-based. We are proud of everything COABC has accomplished and are happy to have been a very tiny part of that.

Will COABC make mistakes? Of course they will. But all in all, the efforts of people that are trying to farm, work off-farm jobs, volunteer, move mountains and generally, burn the candle at both ends are much appreciated.

Tracy Schimpf  
Flying-Two Herb Farm, Kelowna, BC





**B.C.'S BEST CERTIFIED ORGANIC PRODUCTS**

- ORGANIC MILK
- ORGANIC EGGS
- ORGANIC BUTTER  
SALTED / UNSALTED
- ORGANIC SOUR CREAM
- ORGANIC CHEESE
- ORGANIC YOGURT
- ORGANIC ICE CREAM

WE CARRY BOTH  
CONVENTIONAL & CERTIFIED ORGANIC PRODUCTS

FOR INFORMATION CALL 1 - 604 - 434 - 2434

HOME OF B.C.'S FIRST CERTIFIED ORGANIC MILK



COMMERCIAL & HOME DELIVERIES