



Volume 4, Number 3

Summer 2001

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President's Report

by Linda Edwards

One of the most gratifying aspects of the COABC strategic planning session of Directors and staff held in Winfield in June was the ease with which we agreed to a first draft of a vision statement. We certainly have

our differences in this organization, but these are minor compared to the depth of our commitment to common core values. The basic tenets named in our tentative vision statement (to be refined and presented to the next AGM) are:

E food production is based on care for the earth

E we are just one creature among many that are all interrelated and interdependent

E the organic movement encompasses all sizes and components

E priority is local food systems

E tools include development of regulatory frameworks for export and research into appropriate techniques for organic growing

E support/adopt the IFOAM principles of organic farming (see the green booklet prepared by Paddy Doherty titled "What is Organic Farming?")

This gathering was the first step in our strategic planning process, and we have hired Andrea Gunner to continue the process in consultation with the whole membership of COABC. The timing was dictated by the need to have a plan for the Trust Fund in place as soon as possible so that allocations of funds could begin. (See report on page 22.) A wide range of areas were identified as roles for COABC for the next five years, along with many worthwhile and possibly even wonderful projects ranging from promotion of the checkmark to on-farm research and education programs that may be carried out through grants from this Fund. However, these are just projects and they will not contribute to the on-going functioning of the COABC.

A priority identified at the workshop was that the COABC must become a financially self-sustaining organization. Although we will pursue grants for special projects, the core funding, the daily minimal functioning of the organization, needs to be covered by members' fees and/or self-generated income.

The Trust Fund, like all such funding, specifically notes that it cannot be used to cover core operations. Also, if an organization is going to maintain its integrity and independence, it is important that it become financially self sustaining. So COABC continues to experience a very fundamental challenge. Fees from members for the 2001 year are \$35,200. This does not even cover the costs of running our part time office in Vernon. Shelly Chvala, who was the office coordinator until very recently, put in many volunteer hours as well as the ones she was paid for to get the work done. This is a burden we must stop imposing on those who work for us. Other core costs range from insurance, conference calls for directors, the annual general meeting, and Director's expenses to represent the COABC at everything from egg marketing board meetings to other agricultural organizations, on the one hand, to the periodic audits carried out for CBs and maintenance of the standards and communication to the membership, on the other. Our current core activities not paid for by membership fees are being met by temporary grants and volunteer input.

Every member needs to think about what do we want and what are we willing to pay for either in time or money. As an example, better communication about COABC activities and issues to the membership was identified as a priority at the workshop. Now, each Certifying Body belonging to COABC has a Director as a communication link. As well, everyone receives the BC Organic Grower four times a year. This covers all of the current activities of the COABC plus everything from educational articles to the resolutions which will be presented at the AGM. The costs include preparation, printing and mailing. The fees paid to COABC to cover this are estimated to be \$12/member/year; however, this is not the real cost. We have asked Cathleen Kneen who edits and produces the BCOG to keep track of the hours she spends. We know already they are in excess of what she is being paid for. There are also the website and the listserv. Maintenance of these for 2001 is estimated at \$4,500. Putting the Standards on the website, for example, while cheaper than printing hard copies, still cost quite a bit. In addition, we recently instituted a periodic report from the Directors, which is e-mailed immediately to all members who are on this service. The information in this report will also be put in the BCOG. However, there is still concern that this not enough. What other methods of communication are needed? Who will do it? What will it cost?

Another expense included in the current COABC fee is \$15 for membership in the Organic Materials Review Institute. Standards maintenance - a core COABC function - will never be a one time event. Now we could go back to the good old days of trying to research every issue and new product that came up on a volunteer basis and worrying whether a new product is something that can be used without affecting organic certification. Or wondering how our Standards rank in terms of organic standards else-

where: are we as good as we would like to brag we are in this department? Membership in OMRI has greatly reduced the haphazard and very laborious volunteer work to keep our Standards relevant and to know how they stand in regard to those of other CBs and organizations. However, there are still problems with getting information out, reactions back and everything being handled in a timely manner. This is at least in part because it is being done largely on a volunteer basis or added on as an extra job for already overloaded staff. I know, as one of those volunteers, how often I didn't find time to research a request for information as quickly as the person making the request might have liked. How depressing it was to finally get the Brand Names list Canadianized and then not have the time to keep it up to date. So what is the solution? Recruitment of more volunteers or finding money to hire someone on an on-going part time basis to "handle the Standards" for the organization?

The demand is there from the membership for better functioning of the COABC, more services, more timely action. Is it realistic to think we can improve on what we have by more volunteer input? If you are one of the persons currently volunteering either in your own certifying body or in regard to the COABC, can you - are you willing - to do more? If you are not volunteering for one of the many jobs that needs to be done, can you do so? or if one of the current volunteers quit would you be willing to assume those responsibilities?

Maybe it is time to reconsider how we can best spend our volunteer efforts. A number of certifying bodies and individuals have decided they would prefer to use their time farming and volunteering on specific projects rather than the grind of certification. To do this, they are prepared to pay to have all of this work done for them. Some who are producing more than their bioregions can absorb must export; they require a more complex and more arms length process to meet their market requirements. The new certifying body which will be established by 2002 will fill both of these functions. Like all other certifying bodies, it will be totally supported by fees of the persons and/or certifying bodies who contract with it. However, unlike the other certifying bodies, volunteer input for the certification tasks will be very minimal.

There are three alternatives as I see it to dealing with the self-sustaining principle for COABC. One is to reduce what we are doing in terms of core services i.e. discontinue the BCOG, close the office, quit paying for our involvement in the larger world and so on, down to the point where our current fees and income can pay for them. We cannot stop carrying out our mandate regarding the audit, the Standards and overseeing use of the Checkmark. However, promotion, communication (internal and external), research etc. could be greatly reduced or put on hold.

The second alternative, if it is indeed an alternative, is to continue along as we have been with a growing degree of dissatisfaction and insecurity.

The third is to recognize that the growing and vibrant COABC of today needs a different game plan than the one formed in 1993. To do this it is very important that we all think not just about what we want but how we will achieve it. However, as was reaffirmed at the most recent get together, this most amazing organization - the Certified Organic Association of British Columbia - will find a way that is effective and creative and that will combine the best elements of what is both an industry and a movement.



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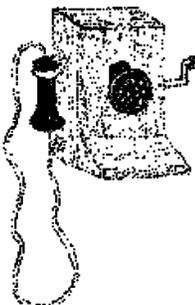
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Fly Away Home

by Linda Edwards

Lady bug beetles are probably the best known and most appreciated, if not loved, of all insects. The adults come in many sizes and colors - pink, red, yellow and orange. Some have no spots and others have as many as nineteen. These adults over winter in groups under rocks, fallen trees and in hollows on hillsides and mountainsides. Their bright yellow, spindle-shaped eggs are laid end up on leaves, in clusters of 10-30.

The egg clusters are similar to those of their much less popular cousins, the Colorado potato beetle. However, you will find potato beetle eggs only on potato and nightshade plants and rarely are aphid populations high enough on these plants to attract lady bugs to stay long enough to lay eggs. In other words, you are safe to destroy egg clusters you may find on these plants.

In about 5 days, tiny, bristly black, alligator-shaped larvae hatch out. After they moult, they are grey to blue-grey with purple and orange markings. They feed for about a month and then enter a pupal or resting stage where they become adults in about 10 days. The pupae are immobile, orange-red bumps with black markings that you can find attached to everything from bark and leaves to fence posts.

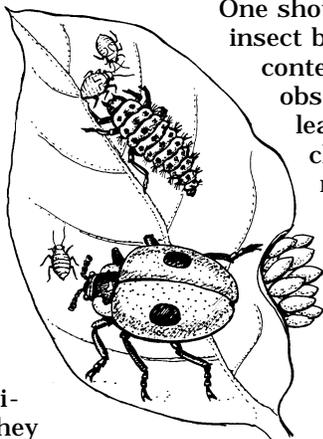
Both the adults and larvae live mainly on aphids. However, they are not very effective at keeping aphid populations from becoming a problem in the first

place. Unlike some other predators and parasites, lady bug adults have no special ability to locate their prey. They have to actually bump into something to find it. They also have a short attention span; careful observations (an entomologist's idea of fun) have shown that if they do not locate prey in 2.5 minutes on a plant they leave, so that low populations tend to escape their notice and therefore control. When there are high populations of aphids, lady bugs do accumulate and are effective in cleaning up infestations. Unfortunately, damage has often already occurred.

One should never use the word "stupid" to describe insect behaviour — though it is tempting when contemplating lady bug larvae. They can be observed wandering aimlessly on the top of a leaf where there are no aphids and never checking underneath where there may be many. Needless to say, survival rate is very low. This, plus the fact that this insect has only one to two generations a year, means the numbers of lady bugs available for biological control is relatively low.

Don't bother buying ladybugs for control of aphids in a specific situation. The insectories that sell them, collect them as hibernating adults (usually in Colorado), and keep them cool and dormant until they ship them to you. When you open the container in your garden or orchard, the beetles fly out with only one genetically implanted aim in mind: to fly as far as they can as quickly as they can to get off that mountain top where they entered hibernation. Flight distances are usually at least half a kilometer and not infrequently much further. Years of research have clearly shown that the only way to keep them where you want them is to put a cage over the plants to be protected.

As you know, damaging outbreaks of aphids in organic production tend to be infrequent. If lady bugs aren't effective in preventing this from happening, what is it? It is the many other less conspicuous predators and parasites. Next issue, I will tell you about one of my favorites — *Aphidoletes aphidimyza* — the serial killer of the predator world. ✓



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Farewell

from Shelly Chvala

Dear organic producers and BCOG subscribers:

As you know, the world of organics has an ever-changing landscape. As of mid-June I will no longer be part of the section of landscape taken up by COABC. I leave my position as Office Coordinator to spend more time in my other occupation, as educator and counsellor.

The new Office Coordinator is Kristen Kane, a witty, intelligent woman with a head for details and a wonderful sense of humor. I have had the pleasure of working with Kristen (that's pronounced "Kursten") in the last few weeks and am certain she will not only be able to keep the current systems operating, but that she will also bring her own brand of organization and creativity to this position.

Three years ago the day-to-day responsibilities within COABC were done by one part-time staff person, but as the organic community has grown, so has the work load and the request for services. We currently have 16 Directors and 3 part-time staff that are dealing with the daily business of operating COABC as a credible provincial organization. I would like to thank all the COABC directors of the last 3 years, the organic farmers & processors and

the staff team, for all of the support and challenges they have offered me. I especially wish to thank all of you who were patient when I didn't know the answers to your questions and those of you who appreciated the help I could offer.

Since I see organic farming as the answer to many of our current agricultural and community development problems, I expect to still be involved in this community, but perhaps in ways that don't require so much paper work! I will at least cheer you on from the sidelines as you cooperatively set goals for organic farming in BC and develop a plan that meets the needs of large, medium and small producers, processors, exporters, the consumer and the Earth.

We're
going to miss
you, Shelly!

Even though there is sadness in leaving, I cherish the experiences and friendships that have enriched my world in the last 3 years of involvement with you, "the organic community".

Thank you
Shelly

Welcome
Kristen!



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Storing Your Crop for Winter Sales

by Paddy Doherty

Most organic crops are grown in the summer, so that's when we sell them. Even in the southern part of the province, the growing season is pretty short. Fresh produce comes in abundance; we work feverishly to sell it, but so do other growers - often the price drops, there is a glut of fresh produce, and the grower is left with a crop they can't sell.

The truth is, the summer is the best time for growing, but there are restrictions to selling in the summer. Wholesalers have been telling us for years that their best season is winter. That's when consumers are home, and feel like preparing meals from scratch. Some of us would be better off putting effort into storage crops: growing in the summer, but marketing in the winter. Many produce items can be stored in a cellar, cooler, attic, or freezer for later sale.

Innovative growers can also extend their growing season into the winter with tunnels and greenhouses and by planting late season crops such as January King cabbage, kale and leeks. Corn salad planted late in a greenhouse can be harvested well into December, even in the interior of the province. These hardy greens can stand many degrees of frost, and will grow whenever there is light and frost-free weather.

Storage Methods

Here are some suggestions for storage from BC organic growers:

Potatoes

Potatoes store well in a constant temperature of 5°C and medium humidity. Many growers use root cellars. There are lots of designs for root cellars - the

BC Ministry of Agriculture, Fisheries and Food can provide growers with information about commercial size root cellars. Many gardening books have designs for household size root cellars. The important factor in designing a root cellar is to provide enough ventilation for the size of the building. There are charts to help you figure this out. Potatoes are stored loose in bins, sorted or otherwise, or in sacks, though the sacks will tend to rot in places if they are left in the cellar for more than a month or two. Some growers use an aboveground-insulated building. With our steadily warmer winters, the cost to keep this storage area at 5°C is minimal. In the warmer parts of the province, the challenge is often to keep the temperature from going above 5°C.

Some growers believe that potatoes should be stored separately from all other vegetables. In any case, potatoes should be separated by some sort of barrier from other crops. If the temperature and ventilation of your storage facility is adequate, you can wash potatoes and store them in bags. This helps solve the problem of producers in northern climates needing to wash vegetables in the winter.

Beets

Beets can be stored under the same conditions as potatoes. Some growers report good results from putting washed beets in plastic potato bags (with holes in them) and storing in bins. Others simply put the beets in a bin with a sheet of plastic loosely draped over them. A vent pipe (with holes in it) directed outside the bin, can be placed in the bottom of the bin before the beets are added.

Celeriac

Celeriac can also be stored with potatoes and beets. It can be tossed in a bin, dirty but dry and will keep throughout the winter. It should be heavily trimmed and washed before selling.

Jerusalem Artichokes (Sunroot)

This nutritious vegetable is thin-skinned, so care should be taken in harvesting. Dry, but don't wash

Winter is when consumers are home, and feel like preparing meals from scratch.



Two commercial root cellars. The barn on left was used for storing seed potatoes. The root cellar on the right is a steel tunnel, holding 700 lbs of potatoes. Note the vent shafts in this photo.

it and store at 5°C, but drier than potatoes (if possible). This can be accomplished by storing sunroot in layers of sawdust or peat or moss.

Cabbage

Cabbage should be stored at 0 or 1°C. in a cooler. It can be stored in bins, but attention should be paid to maintaining airflow through the pile. The bin should be slatted and set off the floor. Cabbage may also be stored in a root cellar, but will not keep as well as in a cooler.

Carrots

Carrots should be washed and stored in large perforated plastic bags in a cooler at 0°. They prefer high humidity. One grower removes the carrots in January, washes them again and re-packs them. He maintains they keep until April this way. Carrots may be stored in a root cellar, in bins or heaps. The carrots on the outside will deteriorate, but underneath, they will keep tolerably well.

Parsnips, turnips, storage radishes

These crops may be stored under the same conditions as carrots.

Leeks

Leeks can be dug in late fall and heeled into an empty greenhouse. They can be safely pulled from the greenhouse in all but the coldest weather. It doesn't seem to hurt them to freeze as long as they are in the ground. If you are lucky enough to live in an area which doesn't receive much frost, you can dig leeks all winter, as with parsnips, carrots, turnips and beets.

Garlic and onions

Both these crops can be stored together in a facility with temperature at 0°C and low humidity. It should be dry and dark and have good airflow. Garlic and onions require proper curing in warm (20°C), dry conditions prior to storage, otherwise, they will not keep.

Winter squash

As with onions, squash requires a curing period before it is to be stored away. Squash needs to be kept dry and dark, at 7°C with good airflow. Many conventional growers wash squash in chlorine bleach solution prior to storage. This is to remove bacteria on the surface and keep the product from rotting in storage. Hydrogen peroxide may accomplish the same result.

Raspberries, Strawberries, Blueberries and other berries

If not sold fresh, all these soft fruits require quick freezing for later sale. Don't try to use chest freezers to accomplish this, as it won't work. Chest freezers are not designed for quick freezing. Putting a lot of warm product in them will turn them into little ovens and your berries will turn to mush before

they will freeze.

Ideally, quick-freezing requires a flash freezer and a freezing unit and a cooler as well. The berries are picked onto shallow picking trays (with slats or holes in them) and stacked overnight in a cooler to draw the field heat from them. They are then put into a flash freezer. This is a special freezing unit with a colder temperature and more airflow than a conventional freezer. Once the berries are frozen, they are removed from the flash-freezer, sorted, (culls, foreign material) packed into freezer boxes, (moist berries such as raspberries require a plastic liner) and stored in the freezing unit.

If you have lots of berries, it is important to have several options for markets. Raspberries can be sold "Individually Quick Frozen" (IQF), as detailed above, or they can be packed into freezer boxes right from the cooler for sale as bulk product for jam and other uses.

Apples and Pears

Commercial orchardists have storage options factored into their management plans. The market for hard fruit is the winter season, so apples are usually stored in large cold-storage facilities. They are also stored in "controlled atmosphere" conditions. Filling a warehouse with inert gas to drive out oxygen keeps apples fresh throughout the winter. For small amounts, apples should be cooled as soon as they are picked and stored at 0°C at medium humidity. They should not be stored in the same facility as vegetables, as apples give off ethylene gas, which has a deleterious effect on vegetables in storage. ✓



This household root cellar may look a bit more familiar to some - it is actually an underground cellar!



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Seedsaving 101 - Part 2 (The Harvest)

by Patrick Steiner, Stellar Seeds

I. HARVEST AND CLEANING

As you tend your plants over the summer and anticipate collecting seed be mindful of the plant's development and the stages it is going through. Visualize what the seed for that plant looks like and use this as a guide for harvesting. Check plants periodically, noting the seeds' growth, and use touch and sight to determine maturity. The mechanics of seedsaving differ from plant to plant but the goal is the same - healthy, robust seeds that will germinate well and grow true to type. Early in the season choose which plants will be left as seed plants - don't eat the peas or beans from such plants, you only lessen the chance of successful seedsaving. Many seeds require a full season to mature properly. Deciding to leave your last pick of market beans for seed will result in a crop that doesn't have time to fully ripen and dry down before frost, thus nonviable seed. Many seeds grow within the flower or pod of the plant - as a general rule it is best to let these seeds mature and dry on the plant. In cases of early frost plants can be pulled whole from the ground (preferably with roots intact) and hung in a dry place. Do this only if you need to and only if the seeds on the plants have

reached full size and simply lack time to dry. Other seeds (such as the cucurbits and solonaceae) grow within a soft-fleshed fruit and require different approaches to seedsaving. Here are seedsaving instructions for a few very popular and common vegetables.

Podded Seeds (such as peas, beans, radishes, brassicas) should be left to develop on the plant and only harvested once the pods have dried down. At this point they can be cut off or the plant pulled whole. A combination of footstomping and beating the pods on the sides of buckets or cans is enough to free most of the seeds. Shaking the can sends the seeds (heavy) to the bottom and the chaff (light) to the top. Scoop most of the chaff off by hand and use screens or forced air (blowing by mouth, hair dryer, or air compressor) to fully clean the remainder.

Lettuce seeds need to be closely watched as flowers open and mature individually. Seeds can be harvested little by little over the course of several weeks. The flowers dry up much like dandelion flowers and the seeds are prone to fall off if you don't collect them quickly enough. Collect by hand or with a light shaking of the plant into a paper bag. Separate the seed from any chaff by putting the seeds in a shallow bowl and blowing lightly. Allow the seeds to dry for a further day or two then put into storage.

Peppers can be sliced in half and the seeds simply scraped out and put on a plate to dry. It is crucial

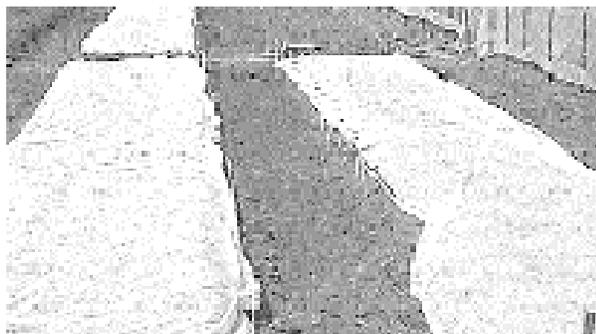
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to allow the peppers to fully mature. Sweet peppers must be red, hot peppers must be beyond the green stage.

Tomatoes are easy to save. My favourite method involves fermenting the seeds because it is simple and has side benefits. Simply slice the ripe tomato in half crosswise to expose the fleshy interior and the seeds. Scoop the seeds and surrounding gel into a bowl or bucket. Leave this to ferment for about three days, stirring once or twice a day. You will quickly see a white-gray mold form on top of the seed mixture. This is a good thing. The fermentation process breaks down the gel sacks surrounding the seed, making seed separation easy. Additionally the process kills many seed-borne diseases. After three or four days add enough water to double the mixture and stir vigorously. The tomato seeds will sink to the bottom; the pulp and lighter, nonviable seeds will float to the top. Pour off the pulp, and repeat the process several times until you have only clean seeds left in your bucket. Drain the seeds by pouring them through a strainer and put them on a plate to dry. To avoid germination, dry the seeds quickly. I simply place a fan on the shelf near the seeds. Stirring the seeds a few times keeps them from clumping together as they dry. Nature is generous and you will have enough seed to share with all your kin and kind.

Cucumbers, Eggplants & Zucchinis should be left on their respective plants long past the edible stage. Cukes will swell then turn yellowish then whitish in colour. You can use the same fermentation method as for tomatoes to quickly and efficiently clean the seed. Eggplants will also change in colour as they stay on the plant. Eventually they will lose their sheen and appear dull and feel hard. Pull these off the plant and allow them to mature another few weeks in the house. Slice them open and pick the seeds from the flesh or cut it up and give it a whirl in the blender with some water, pouring off the pulp until only the heavy seeds remain at the bottom. Put on a plate and dry. Zucchini should be left on the bush to grow monstrous. When their skin gets to the point that it can no longer be easily punctured by your fingernail, pull them off and allow them to mature another three to five weeks in the shade. All this time the seeds will be maturing, feeding off the fruit. Slice them open and separate the pulp from the seed. Rubbing the pulp against a screen in a bowl of water helps to clean the seed quickly, then set it on a plate to dry.

Flowers can be easy or challenging to save depending on the variety. Once the petals have dried down and the seed is exposed observe the seed to see if it looks mature. Compare it to your knowledge of what the seed looked like when you planted it. It is helpful to hold a few seeds back in the spring as reference. Size, shape, and colour should be comparable. Many flower seeds are easy to find while others are so well hidden it can be difficult to know what part of the flower to save. Good luck! A series of different

sized screens is the best way to properly clean flower seeds. For home use cleaning hardly matters. Just save the dried flower heads and rub the whole thing over soil mix in the spring. Presto...baby flowers!!

II. SEED STORAGE

The four most important factors in storing seeds are that they be kept cool, dry, and dark, with a minimum of temperature fluctuations. 5°C is an ideal temperature for general seed storage. Choose a space that provides these as much as possible. Seeds are a living (though dormant) organism. While in storage they "breathe", taking in oxygen and releasing carbon dioxide. With increased exposure to air the enzymes and proteins stored within the seed (which are its nutrient store and vital to vigour and germination) begin to degrade, resulting in poor quality seed. Many people like to keep their seeds in an airtight container, such as a glass jar. This slows the seeds respiration and prolongs its lifespan. Others prefer storing them in paper bags which allows moisture to be wicked off the stored seed, this is especially important if you are not sure how well you have dried your seed. Others will freeze their seeds to arrest the degradation process. These seeds should also be in an airtight container so as not to pick up moisture inside the freezer. If seeds are not properly dried however, moisture inside the seeds will expand and rupture cell walls. This is a bad thing. If seeds break rather than bend when folded they should be sufficiently dry for the freezer. Not all seeds can be tested this way, however, and paper bags in a dry, cool place are much better than gambling with your seed supply. Well stored seeds will last two or three times longer and most importantly grow more vigorously and be less prone to disease.

For more information on these procedures check out some of these resources:

The Seed Savers' Handbook, Michel and Jude Fanton

Seed to Seed, Suzanne Ashworth

Growing Vegetables West of the Cascades, 5th edition, Steve Solomon www.seedsavers.org

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Water Quality on Organic Farms

by Paddy Doherty

Principles

Organic farmers are generally in that business because they care about the environment and wish to leave the earth a better place than they found it. These sentiments sound high-minded and self-righteous to others, but they do reflect the values most of us carry around. Otherwise, what would be the point; we're certainly not in it for the money.

Assuming that we agree (more or less) with this belief system, then it is necessary for us to do all we can to protect and enhance water quality in our environment. Not spraying pesticides is good for water quality, but allowing our livestock routine access to watercourses is not good. We cannot justify our organic designation by withholding one bad practice, but at the same time, allowing other bad practices.

Government Regulations

Different levels of government have different laws and rules affecting water use and water quality. The Canadian Food Inspection Agency regulates water quality associated with food production and processing. For example, the CFIA requires that produce must be washed in potable water. "Potability" is defined as meeting the Canadian Water Quality Guidelines for drinking water. An environmental laboratory will issue a "Potability Certificate" for a water sample. They don't test for everything, just the most likely problem areas.

The British Columbia Ministry of Environment has drafted "Approved Guidelines for Water Quality". These standards are not set in law, but offer parameters around which water users can operate. For example, they suggest that irrigation water for leafy vegetable crops should contain no more than 200 faecal coliforms per ml. This is because faecal contaminants from overhead irrigation can be trapped in the crevices in leafy vegetables. These contaminants cannot be subsequently washed away, even in potable water. The guidelines offer standards for livestock drinking water (low levels of copper for sheep, for example) and for industrial water (including dairy processing facilities).

Water Quality in Organic Standards

The Board of Directors of the COABC has determined that enforcement of water quality regulations is best left to the agencies responsible for them. Thus, water tests will no longer be required of enterprises in the BC Certified Organic Program. The new standard will state that, "It is the responsibility of organic enterprise operators to comply with all government regulated water quality objectives," or some such form of words.

Responsibilities of Organic Operators

Not requiring water tests does not remove responsibility for water quality from everyone involved in the production of organic food. To the contrary, it is incumbent on every organic operator to know the laws and to obey them. This means washing our vegetables or fruit in clean, potable water and keeping strict standards of cleanliness around all processing facilities.

It also means protecting water quality. The principles of organic farming require us to protect watercourses, as does the Ministry of Fisheries and Oceans. Livestock farmers should control cattle access to streambanks and water bodies. Livestock grazing and loitering on streambanks for long periods can damage vegetation, deposit manure, and cause soil erosion along the banks. This can degrade water quality and destroy fish habitat. Nutrients in manure, which are carried by runoff into water bodies, can cause an increase in the growth of algae and aquatic plants. Bacteria or parasites in manure, carried by runoff to nearby surface waters, can spread diseases among herds. They can also pose a health threat to humans by making water unsafe for drinking or swimming. In some situations, greater setbacks from watercourses may be required.

Similarly, organic operations that have compost and manure storage facilities on their farms must follow the British Columbia Code of Agricultural Practice for Waste Management, part of the Agricultural Waste Control Regulation, under the "Waste Management Act". This regulation requires 30m setbacks of compost facilities from any water source or watercourse. It also requires them to be designed in such a way so that run-off from such facilities is contained, and may not enter streams or rivers.

E.coli and Organic Farms

Eco-Farm and Garden ran an excellent story on E.coli (summer 2000) by David Patriquin. It is too long to reproduce, but I will highlight a number of points.

- E.coli 0157 is a virulent, toxic bacterium found in the gut of many animals.
- It is very infectious and can be dangerous for children and persons with weakened immune systems.
- It is spread from contamination of ruminant manure.
- Most bacterial pathogens are destroyed by composting at 55-60° C for a few hours or less
- The longer a compost is aged, the less chance there is of it containing pathogens
- Two to four months of curing times (summer) has been suggested to rid compost of 0157
- Drinking water for livestock (water troughs) is suggested to be a main source of transmission of 0157 from one animal to another.

The box at right has been reproduced with permis-

sion from *Eco-Farm and Garden* magazine.

As organic farmers, we market our products by implying our food is grown with the greatest care and respect for the environment. We'd better make sure this is the case. Our farms should be models for agricultural sustainability, cleanliness and environmental protection.

If you have a water problem on your farm, find out what can be done about it. Talk to the Ministry of Agriculture, Fisheries and Food and the Ministry of Environment. If you want to try something different, like bio-filters for cleaning wastewater, talk to the COABC about a research proposal. It's important that organic farmers lead the way with environmentally responsible agriculture, and not follow someone else's trend.

Thanks to:

EcoFarm & Garden is the magazine of the Canadian Organic Growers (COG) Inc. For more information, contact COG at PO Box 6408, Stn J, Ottawa, ON, K2A 3Y6 or www.cog.ca.

Thanks also to David Patriquin.

Some provisional guidelines for reducing E.coli 0157 on the organic farm and garden:

- ☐ Ensure that farm residents, workers and visitors are aware of the nature of the E.coli problem, and of personal preventive measures they should take to reduce risk.
- ☐ Prohibit or carefully supervise activities of small children in areas where they might be exposed to fresh manure.
- ☐ Follow good sanitation practices for livestock, harvest containers and contact surfaces, and wash vegetable produce free of soil.
- ☐ Flush water troughs with fresh water frequently and clean them regularly.
- ☐ Consider whether imported manure is highly likely to contain E. coli 0157 (e.g. fresh ruminant manure from a feedlot)
- ☐ Take care to prevent cross-contamination of old or composted manure with fresh manure
- ☐ Make improvements to the composting system to ensure thorough mixing of compost during the high temperature phase.
- ☐ Allow compost to cure for 2 – 4 months (or longer) after the heating phase.
- ☐ Aerate slurries for 1-3 months, or compost them (e.g. with straw).
- ☐ Age uncomposted manure for at least one year before use.
- ☐ Clean hides of livestock before taking them to the abattoir.
- ☐ Process liquid effluents from the farm in holding ponds/wetlands for 20 days or more.

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Calf Management

Daniel M. Weary

Improving Calf Welfare and Production

Recent UBC research indicates:

- Calves kept with the cow for 2 weeks gain weight at more than 3 times the rate of conventionally reared (i.e. early-separated and fed milk at 10% body weight/day) calves.
- Calves fed as much as they want (ad libitum) drink about twice as much milk but gain weight at twice the rate of conventionally fed calves.
- Ad libitum teat-fed calves can be successfully reared in small groups.
- Gradual weaning by diluting milk allows calves to slowly increase starter intake.
- The pain and distress due to dehorning can be greatly reduced using medications available from your veterinarian.

Separation from the cow

Under natural conditions cows leave their calves in groups from about 2 weeks of age and usually continue to nurse calves for more than 6 months.

Separating cow and calf early is thought to allow for better supervision of colostrum, milk and solid food intake and help prevent transmission of disease.

Given that the cow and calf will be separated at some point, early separation is also thought to cause less distress to both parties. In two recent studies we have examined some of the effects of the age of separation on cow and calf behaviour and performance.

In the first experiment, calves were separated at ages that reflect ranges seen in the industry at present (6 hours, 1 day, or 4 days after birth). In the second experiment we also looked at calves separated 14 days after birth (the time when cows leave calves in groups in the wild). In both experiments we found that cows and calves separated later responded more strongly to the separation in terms of increased activity and more vocalizations. We also found that cows kept with calves yielded less milk at milking. However, yields rebounded after separation such that total yield over the lactation did not differ. Perhaps most importantly, we found that calves separated at 14 days of age took advantage of the extra milk by gaining weight at more than three times the rate of those separated early (Fig. 1), and the calves maintained this weight advantage even after separation. Thus separating calves at later ages does increase their response to separation, but allows calves to grow much faster.

Feeding milk

The most dramatic finding from the cow-calf separa-

tion work is the difference in weight gains between the early separation calves and calves kept with the cow for 2 weeks.

The way in which dairy calves are offered milk after separation from their mothers can have marked effects on many aspects of their behaviour, performance and welfare. The most common system is to feed them twice daily from buckets, typically an amount equivalent to 10% of their body weight/day.

Surprisingly there has been very little work on the effects of giving calves additional milk. In one recent experiment, Van Amburgh et al. (1999) were able to achieve dramatically different weight gains by feeding calves different amounts of milk by bucket, 3

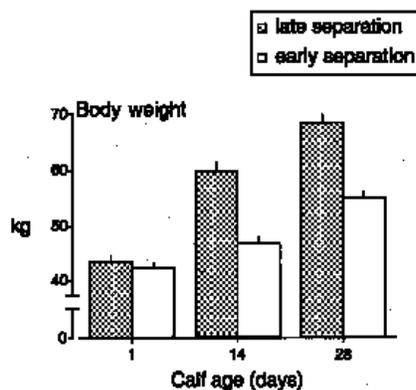


Figure 1. Mean (\pm S.E.) calf weights at birth, and at 2 and 4 weeks of age. Values are shown separately for calves kept with the cow until 2 weeks of age ($n=12$), and calves separated from the cow on the day of birth ($n=12$) (from Flower and Weary, 2001).

times per day. These improved weight gains translated into much improved gain to feed ratios.

Rather than providing milk from a bucket, a teat allows calves to drink in a more natural manner. In addition, calves fed from an artificial teat tend not to suck on each other or on objects, unlike calves fed from a bucket. Primarily, this increases overall feeding time, especially if a teat with a small orifice is used. We have found that calves fed ad libitum by nipple spend approximately 45 min per day drinking milk, compared to just a few minutes per day for bucket-fed calves.

In a couple of experiments we have tested the effects of feeding calves ad libitum by teat. In each experiment we compared weight gain, milk intake, starter intake and number of days with diarrhea for calves fed milk conventionally (i.e. twice daily by bucket at 10% of body weight per day) versus ad libitum from a teat. In the first experiment we found that weight gains during the first 2 weeks of life were less than 0.4 kg/d for the conventionally-fed calves versus 0.85 kg/d for the teat-fed ones. During the next 2 weeks gains were 0.58 and 0.79 kg/d respectively. In a second experiment we replicated these findings and showed that the teat-fed calves maintained this advantage in body weight after weaning at 5-6 weeks of age. In both experiments the differences in

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weight gain were likely due to teat-fed calves drinking approximately twice as much milk as the conventionally-fed calves.

It is commonly thought that calves should be encouraged to increase their consumption of starter at an early age. We found that over the first 5 weeks of life, feeding calves less milk did increase starter consumption (Fig. 2) but also severely limited weight gains. Moreover, we have found that the larger (nipple-fed) calves quickly catch up to and indeed surpassed the conventionally-fed calves in their intake of starter after weaning. Thus feeding more milk to calves during the first 5 weeks of life seems to have a number of benefits.

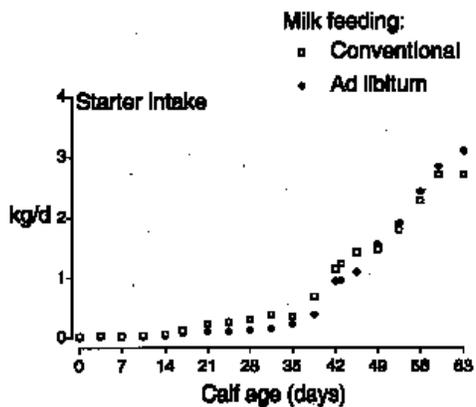


Figure 2. Mean Intake of calf starter in relation to calf age. Values are shown separately for calves fed milk conventionally (10% of body weight per day by bucket; n=10) or ad libitum by teat (n=10).

Group versus individual housing

North American dairy calves are normally housed in individual pens or calf hutches until weaning, and this type of housing is often recommended. The preference for individual rearing stems from the idea that rearing calves individually results in higher weight gains or a lower incidence of disease, and that it may reduce behavioural problems such as cross-sucking. However, calves are social animals and keeping dairy calves in groups may provide a number of advantages to both producers and their calves. Group housing provides greater access to space, that together with social contact, facilitates the expression of normal behaviour. Group rearing can also reduce the labour of cleaning pens and feeding.

In one recent experiment we looked at the effect of forming the most rudimentary group possible, a pair. We fed milk ad libitum by teat to both individually-housed and pair-housed calves and found that all calves remained healthy and gained weight rapidly before and after weaning. Indeed, we found no difference in weight gains between treatment groups except when calves were being weaned. During this week, individually-penned calves lost weight but the pair-housed calves continued to gain weight at pre-weaning levels. We observed no signs of disease except diarrhoea. The incidence of this condition was low and did not differ between the

housing treatments.

The lack of effect of pairing on disease is not surprising. Individual housing will have little effect on air-borne pathogens, and contact between calves can still occur between adjacent pens. Thus management (e.g. cleanliness and ventilation) and calf immunity may play a more important role in disease susceptibility than housing or feeding system. The importance of these other factors may explain the variability in results of earlier studies on group housing. Our work shows that housing young dairy calves in small groups is viable in terms of calf health, performance and behaviour.

Weaning onto solid food

Under natural conditions calf weaning is a gradual process with calves often continuing to receive some milk from the cow until they are over 6 months old. During this time the amount of milk consumed slowly declines as the calf becomes established on solid food. Calves on dairy farms are typically weaned from milk at 1-3 months of age, a time when they are still consuming significant quantities. This more abrupt transition can be distressing to the calf and can result in a growth check.

To ease the transition to solid food, some producers gradually restrict milk intake relative to body weight by capping the milk ration as calves continue to grow. Others reduce the size of the daily milk ration, for example, from two meals to one meal per day. Still others achieve a gradual reduction in milk intake by providing the same volume of liquid, but diluting the milk with water.

To determine the effectiveness of gradual milk restriction on ease of weaning, we compared calves that were weaned abruptly with those that were weaned more gradually by diluting the milk ration with water. Calves were fed milk at 10 % of body weight per day. The abruptly weaned group was continued on this ration until 8 weeks of age. For the gradual milk restriction group, milk was increasingly diluted with water (3.6 % per day) starting at 5 weeks of age. Gradually weaned calves ate significantly more starter than the abruptly weaned during weeks 5 to 8. After week 5 the increased consumption of starter compensated for the reduced milk ration provided to the gradually weaned calves, such that total dry matter and protein intakes were nearly identical in the two groups. Weight gains were lower for the gradually weaned calves at week 7, but there was no difference in gains between the two groups by week 8. Another interesting aspect of this gradual weaning method is that calves show little behavioural response to the dilution; they continue to drink the diluted milk, even when it has been diluted to 100% water, and drank it in much the same way as they drank milk from a bucket. This lack of response contrasts with the increased vocalizations and activity that usually accompanies abrupt weaning. In other work we have diluted milk more rapidly, from 100% milk to 100%

water over 5 days, with similar success. We have also successfully incorporated gradual weaning with weaning at younger ages and with ad libitum feeding.

Dehorning

The organic standards require that procedures such as dehorning and castrating, if performed, must be done with the least possible distress to the animal.

It is generally recommended that dehorning be conducted when the calf is less than 3 months old. Horn buds of younger calves are typically removed using caustic paste or a hot iron, but the latter is more commonly used on dairy calves. There is good evidence that both methods are painful.

Even when the procedure is carried out at an early age, hot-iron dehorning causes a pronounced behavioural response such that significant physical restraint is necessary to carry out the procedure. Increased levels of circulating "stress hormones" (corticosteroids) are commonly detected after dehorning, although administration of a local nerve block dampens this initial increase. Local anesthetic also reduces behaviours associated with the immediate pain response (e.g. tail wagging, head movements, tripping and rearing) and those indicative of post-operative pain (head rubbing, head shaking and ear flicking).

Although local anesthetics are effective in reducing the immediate pain after dehorning, the use of local anaesthetic alone may not be enough for at least two reasons. The first is that calves respond to both the pain of the procedure and to the physical restraint. Calves dehorned using a local anaesthetic still require restraint and the difference in the behavioral response between treated and untreated calves can be so subtle that it is difficult for observers to judge if nerve blockage was achieved. Calves must also be restrained while the local anaesthetic is administered, as well as during the actual dehorning. Thus calves experience the distress associated with restraint on two occasions, and still may not receive an adequate nerve block. The use of a sedative (such as xylazine) can essentially eliminate calf response to the administration of the local anaesthetic and the need for physical restraint during the entire dehorning process. A sedative makes it easier to accurately deliver the nerve block, and the lack of restraint makes dehorning much easier for a single worker.

A second unsatisfactory aspect is that local anaesthetic alone does not provide adequate post-operative pain relief. The most popular local anaesthetic, lidocaine, is effective for only 2 to 3 hours after administration. Indeed, the results of recent studies indicate that local anaesthetic treated calves actually experience higher corticosteroid levels than

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untreated animals after the local anaesthetic loses its effectiveness. The use of non-steroidal anti-inflammatory drugs (such as ketoprofen - similar to the ibuprofen you may take for a headache), in addition to a local anaesthetic, can keep stress hormones and behavioural responses close to baseline levels in the hours that follow dehorning.

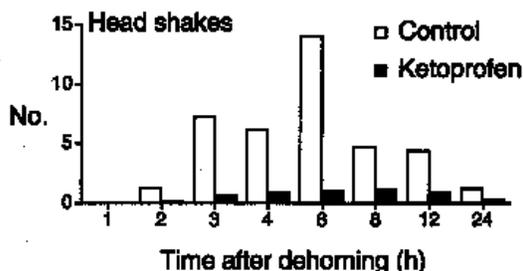


Figure 3. Mean number of head shakes of calves dehorned as controls (empty bars, n=10) or with ketoprofen (filled bars, n=10). All animals received a sedative and nerve block before dehorning. Results are shown in relation to time after the dehorning (from Faulkner and Weary, 2000).

In one recent experiment we dehorned calves with a hot iron, and all calves were initially sedated with xylazine and received a lidocaine nerve block. To determine the extent of post-operative pain and how this could be treated half of the calves were also given ketoprofen in their milk meals. We found that calves treated with ketoprofen showed little head shaking, ear flicking and head rubbing after hot-iron dehorning, but calves that received no ketoprofen showed much higher frequencies of these pain-related behaviors (remember that all animals received the sedative and nerve block). As illustrated in Figure 3, the magnitude of this effect varied with time after dehorning. Calves treated with ketoprofen showed almost no head shaking throughout the 24 hours following dehorning. Calves that did not receive the ketoprofen were frequently observed head shaking, with response peaking 6 hours after dehorning.

We therefore recommend that dairy producers, in consultation with their veterinarians, consider a combination of treatments for calves being dehorned. The use of a sedative allows for careful administration of the local anaesthetic, with no response by the calf. The combination of sedative and local anaesthetic allows for dehorning with no immediate pain response. The combination of sedative, local anaesthetic and a non-steroidal anti-inflammatory drug reduces the response to the pain both during dehorning and in the hours that follow.

The complete article with full references and acknowledgements available on request from BCOG (see address in the masthead), or Dan Weary at Animal Welfare Program, University of British Columbia, 2357 Main Mall, Vancouver, BC, V6T 1Z4 Email: danweary@interchange.ubc.ca



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News from BCAC

The British Columbia Agricultural Council is the body that represents BC farmers to the BC government. It was formed some years ago to replace the BC Federation of Agriculture and has been struggling with some of the same issues that destroyed the BCFA: how to run an inclusive organisation without it breaking up into many separate commodity and special interest groups.

The BCAC is proposing ten 'sector/interest' groupings: Dairy, Cattle, Other Livestock, Poultry, Horticulture Vegetable, Horticulture Ornamental, Horticulture Interior, Grain and Oilseeds, Community Agriculture and Other (that's us) and Horse. In the case of "Community Agriculture and Other", the sector members would be F.A.R.M., Farmers' Institutes, BC Honey Producers, the COABC and other groups. Each member would pay \$500 membership to the BCAC and would receive direct communication from the BCAC. Each sector will be responsible for another \$5,000. However, additional fees will be developed in the future.

Each sector will have one representative and one vote on the board of BCAC. How they elect or appoint their representative is up to the individual sectors to determine. Though not entirely to our benefit, this process has the potential to give the COABC more input to the BCAC than we have had in the past. BCAC will be sending out a proposal in the near future, and it will be up to your Board of Directors to decide where we will go with respect to the BCAC.



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Update on Biotech

by Cathleen Kneen

GE Food Labelling Legislation in BC

Despite the change in government, the office of the BC Attorney General is still accepting comments and suggestions on the "exposure bill" introduced by the previous government known as "the genetically engineered food labelling act".

Bill C-18 provides the 'envelope' for regulations and standards, to be drawn up after a period of public consultation, governing the mandatory labelling of GE foods. There is a comprehensive discussion paper on the Government website:

http://www.ag.gov.bc.ca/legislation/gef/ge_consultation_info.htm
(you can also just go to www.ag.gov.bc.ca and follow the links).

While labelling of foods (and hazardous substances, for that matter) is a Federal matter, Bill C-18 allows BC residents to make a strong case to the Federal Government to protect public health and personal choice by ensuring mandatory labels on foods produced through genetic engineering. Without such labels people cannot choose whether or not to consume such foods. Furthermore, unless such foods are labelled, there is no way to tell whether or not they have an effect on human health, since no comprehensive tests have been done before they were released into the food system. The issue, of course, is liability: if the food is not labelled, the manufacturer cannot be held liable for any ill effects it causes.

As an organic farmer, labelling of GE foods may be much lower on your list than stopping the growing of GE crops, particularly in your own region where they will contaminate your own crops. It is nevertheless an important first step in the development of political will that will move governments, both Federal and Provincial, to act on the realization that the population wants nothing to do with genetic engineering in food or food production. Taking the time to send a comment to the Attorney General can make a real difference.

The full discussion document can be obtained from, and comments sent to

Ann Ratel, Ministry of the Attorney General
1001 Douglas Street, Victoria, BC V8W 9J7
fax: 250-356-6574 (BC residents can call toll-free through Enquiry BC, 1-800-663-7867).

Meanwhile, in Ottawa:

Bill C-287, An Act to amend the Food and Drugs Act (genetically modified food) has been put forward by Charles Caccia, Liberal M.P. for Davenport (Toronto) and the "second reading" debate is scheduled to conclude in September, after the summer

recess. A vote will then be taken on whether or not to refer the bill to the House of Commons Standing Committee on Health. This is an important opportunity for a genuine public debate and should be supported by every MP, even if they have misgivings about the bill's provisions.

The bill calls for the mandatory labelling of all GE foods and also requires the Minister of Health to cause a registry of all GE foods to be maintained and long-term research to be conducted on human health consequences. It is careful to define "genetically modified food" as a food that is derived from genetic engineering thereby avoiding the specious argument that GE canola oil, for example, should not be labelled because the oil can be assumed to not contain the altered protein.

The biotech industry is vigorously lobbying against this bill, and it is important that all MPs hear from their constituents that we support it. You can simply send a letter or postcard to your MP at House of Commons, Ottawa, Canada, K1A 0A6 (no postage required) saying that as a farmer and a consumer you want any foods derived from genetic engineering to be labelled as such and ask your MP to support Bill 287.

Possible wording:

Dear MP so and so,

I strongly support Bill C-287, which would implement the mandatory labelling of genetically engineered (GE) food. I urge you to support and vote in favour of referring Bill C-287 to the Health Committee.

1) Referring this bill to committee is an essential step towards a full parliamentary debate on the subject of this bill.

2) Canadians want to know which foods are genetically engineered.

3) The bill would give consumers the right to know what kind of food they are eating and provide Canadians with the right to choose.

I look forward to hearing from you on this very important issue.

If you want the details, the complete bill can be viewed at www.parl.gc.ca/common/bills_house_private



a Division of TerraLink
Horticulture Inc.

Jim Bartlett

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And in your very own grocery store:

Loblaws has recently made news by ordering its suppliers to remove or cover any labels that identify food as being free of GMOs. The chain has given food producers until September 1, 2001, to comply with the order. There is no legal requirement for this move, as long as the supplier can back the GMO-free claim. Nevertheless, many suppliers are afraid to speak out lest they lose their contracts with the Canadian giant, which includes the Real Canadian Superstore, Real Canadian Wholesale, Club, Extra Foods, Shop Easy, Lucky Dollar, SuperValu, and no frills, among others. Nature's Path has complied with the order by blocking out the GMO-free claim with a magic marker. Loblaws' spokesman, speaking out of the other side of his mouth, has commented that the chain's President's Choice Organic label is, of course, GE-free.

Naomi Klein has suggested that we can perhaps look forward to a new house label in Loblaws stores, "Memories of Consumer Choice". Meanwhile, look for the magic marker blackout when you shop.

And, please, contact your local grocery store or send an email protesting this ridiculous edict to customer_service@weston.ca or call 1-800-296-2332. ✓

News Brief

Funding for Accreditation

Canada's Agriculture and Agri-Food Minister, Lyle Vanclief announced funding to assist Canadian Certification Bodies applying for accreditation under the Standards Council of Canada. Totalling \$375,000 the program will reimburse certifying bodies 50% of the cost of applying to the Standards Council of Canada, up to \$25,000 each.

The COABC will have to determine what the best course of action is:

1. Encourage all CB's who need export accreditation to apply to the SCC.
2. Have one export-oriented CB apply to the SCC.
3. Have the COABC work in partnership with the SCC to deliver their accreditation in BC (this would be to the Canada Standard).
4. Continue to promote our own accreditation (BC Certified Organic); make agreements where possible and build on the success we have already had.

The board of directors will continue to explore all the options and ensure the door is kept open for whatever system will work in the best interests of BC's organic farmers. ✓

IFOAM 2002: Cultivating Communities

14th Organic World Congress August 21-24, 2002 in BC

7th International Congress on Organic Viticulture & Wine

August 20-21, 2002

Ocean Pointe Resort Hotel
Victoria, BC Canada

Canadian Organic Growers, in cooperation with the German organic viticulture organization Ecovin, (previous organizers of the Congress) and CCOF-California Certified Organic Farmers, will host the 7th International Organic Viticulture Congress August 20-21, 2002 at the Ocean Pointe Resort Hotel in Victoria, British Columbia.

A focus of the Congress will be the effect of production techniques on the sensory quality of organic wine; in particular the effects of different methods of soil and vegetation management, techniques for plant protection, and appropriate enological interventions. Delegates will also be able to share experiences and exchange views on consumer expectations, market opportunities and the outlook for the organic wine sector around the world.

Contributions are invited from producers, researchers and organic wine experts. Contributions can be for oral presentations (15 minutes), posters or workshops. Please send an abstract or summary of your proposed contribution, in English and not exceeding 300 words, to the IFOAM 2002 office by October 1, 2001. In addition to your summary please provide your name, address, phone, fax and email address, the title of your contribution and preferred type of presentation (oral, poster, video).

To submit your abstract electronically, go to our website:

www.cog.ca/ifoam2002 or send it via e-mail: ifoam2002@cog.ca as part of the message not as an attachment.

The Congress program will include plenary speakers, poster sessions, video presentations and discussion groups. There will be a wine awards dinner at Sooke Harbour House and an optional half-day tour to the Venturi-Schulz vineyard and winery in Cobble Hill located north of Victoria. The possibility of a pre-congress tour of Californian organic vineyards is under consideration. More details will be available with registration information in October 2001.



The 4th IFOAM Organic World Exhibition

August 24-26, 2002

St. Ann's Academy, Victoria,
British Columbia.

The 4th IFOAM Organic World Exhibition will be held in conjunction with the 14th Organic World Congress. For one weekend in August 2002 Victoria will be the "organic" capital of Canada! This international organic festival is an opportunity to showcase certified organic products from around the world.

The attractive heritage building of St Ann's Academy will provide a unique setting for the marquees and individual display tents scattered throughout the grounds.

Commercial exhibitors are invited to display their finest organic food, beverage and fibre products, and to offer them for sampling and for sale. Exhibit space is offered at reduced rates to non-profit groups who wish to inform the public about organic agriculture projects in their country.

Cultural activities, music, and other performances will be taking place throughout the Exhibition as well as a program of films and speakers. In keeping with the principles of organic agriculture, this event will strive to be as environmentally friendly as possible. In preparation, organic methods are being used in the grounds and heritage orchard this season at St Ann's and the World Exhibition will be a 100% recycling-no waste event with recycling facilities on-site.

Come and join in the fun and sample the best the organic community has to offer. Admission is free for residents, tourists and congress delegates. August is the height of the tourist season and 15,000 people are expected to visit the site during the course of the weekend. Exhibitors are advised to book their space as early as possible. Display space will be allocated in tents of various sizes from individual 10' x 10' (3m X 3m) tents to table top displays in large marquees. The minimum space offered will be 60sq ft. Prices will range from \$8.00- \$12.50 per sq. ft plus GST. Please contact the IFOAM 2002 office for full details.

The deadline for contributions to the 14th IFOAM Organic World Congress is:

November 7, 2001.

For more information about IFOAM 2002 "Cultivating Communities"

IFOAM 2002, c/o Building 20, 8801 East Saanich Road Sidney BC, V8L 1H3, Canada

Tel: 250-655-5662 • fax: 250- 655-5657 • email <ifoam2002@cog.ca> • website: www.cog.ca/ifoam2002



Bio Dynamic News

by Mary Forstbauer

The Bio Dynamic Agricultural Society of British Columbia held its

AGM/Soils workshop in Abbotsford at the Peardonville Hall. The key attraction was Walter Goldstein who made presentations on Saturday and Sunday. Dr. Goldstein has worked at the Michael Fields institute since 1986, conducting studies of biodynamic, conventional and organic farming; breeding and developing an open-pollinated corn; and leading or assisting in instructional projects for farm planning, biodynamics, soil fertility management and dryland farming. With soil scientist Chris Koopmans, he helped develop an organic matter budgetor, which is the subject of several multi-year projects Michael Fields is conducting in on-farm and systems trials with farmers and other collaborators in Illinois and Wisconsin. At Michael Fields he has instructed agricultural interns, farmers and growers in sustainable agricultural and organic practices in workshops, series, schools and projects.

In addition to all of this, Walter manages his own small farm, grazing sheep, tending fruit trees and raising herbs. For this workshop, participants were encouraged to bring samples of their farm or garden soils to the meeting. We all got our hands dirty while Walter took time to explain the differences between the soils. The soil variations were many and it was interesting to see the value of compost, green manure and BD preparations. Walter had all of us excited about the soil and its different qualities.

On Saturday evening the program moved closer to home with speaker Natalie Forstbauer, who shared her love of farm and family. As many participants knew Natalie as a child, her entertaining and appropriate presentation was particularly appreciated.

A highlight of most organic gatherings is the food, and this was no exception: we shared 100% organic food donated by our sponsors and participants. The BD Agricultural Society of BC would like to thank the major sponsors of the event: Pro Organics, Wild West, and Capers. Also thank you to the many

New Bio Dynamic Directors

President – Mary Forstbauer

Vice President – Robert Galleger

Secretary – Karl Hann

Treasurer – Bonni Townsend

Past President – Jonas Huston

Directors at large –
Lawrence Lampson &
Walter Harvie



farms that donated their farm product for us to enjoy. Meals were prepared by the Forstbauer Family. A special thank you to Annamarie, Katrina, and Vanessa who looked after the meals and clean up.

Classifieds

My family has 40 acres of farmland in Pitt Meadows B.C. for lease or sale. It might be suitable for organic farming. It has sat unused for over 20 years. It was previously used for dairy farming and now is overgrown grass. Please call Dave at (604) 899-6270.

Certified Organic Farm For Sale in Prince George.

740+ acres, beautiful view over 3 miles of river frontage, nicely isolated for best organic growing, best sandy soil in area, best for grains and vegetables, older mobile home, outbuildings, grain storage, heated workshop, greenhouse, asking \$500,000 without equipment, \$600,000 with equipment. For more info, phone or fax (250) 971-2270 after 7pm, cell (250) 613-9029.

9 Day Cob Workshop at Vialo Orchard, an organic farm in Cawston.

Learn how to make your own home with Cob, a traditional mixture of earth, sand and straw. Sculpt a personalized house with built in seats and shelves. Evaluate natural alternatives for roofs, floors, plasters and insulation. Cob homes are warm and energy efficient in a temperate climate. Very inexpensive method of building. Instructor will be expert natural building designer Ianto Evans of Cob Cottage Co. \$560 CDN includes main meals. Discounts and trades available. Volunteers before and after workshop welcome to participate. Contact Cindy Walker (250) 499-2550 or Cob Cottage Co. (541) 942-2005 or www.deatech.com/cobcottage

BC Certified Organic Booth Available.

The COABC owns a display booth that is available for use by certifying bodies. This is a large, portable display booth in three sections. One section is usually enough for a small trade show or Farmers' Market-type event. The booth is equipped with photos, and some posters and printed materials are available from the COABC. Certification bodies that wish to use the booth for a Farmers' market or trade show should contact Paddy Doherty at 250-747-3287 paddy@quesnelbc.com The booth can be shipped on the bus or Paddy can bring it with him to an event.

For sale: Certified organic European Razorback finished hogs and weaners. Call Michael 250-442-3745.

We invite all organic farmers to explore bio dynamic methods. Check out these web sites:

<http://www.mfai.org/>

This is specific to the Michael Fields Agricultural Institute

<http://www.attra.org/attra-pub/biodynamic.html>

<http://www.attra.org/attra-pub/biodynamic.html#preparations>

<http://sacred-soil.com/bdpreps.html>

<http://rimu.orcon.net.nz/garuda/BDservices.html>

<http://www.stashtea.com/teatour/61.htm>



What is YOUR Vision?

by Cathleen Kneen with Andrea Gunner

Can you believe a bunch of farmers taking three days in the middle of June to update our Strategic Plan?! The unfortunate timing was dictated by the fact that a Strategic Plan is required to release the \$1 million Organic Industry Development Trust Fund which was recently announced by the B.C. Ministry of Agriculture and Food. The sooner the Plan is prepared, the sooner funds can be released.

COABC Directors had already hired a consultant (Andrea Gunner) and appointed a steering committee: Debbie Boyle, OTA; Roger Breed, COPA; Kerry Clark, BCMAFF; Linda Edwards, COABC; Cathleen Kneen, COABC; Tracey Innes, AgCanada; Bob McCoubrey, NOOA; and JoAnn Sandhu, BCMAFF. The Committee will direct and communicate with Andrea and provide input and feedback on the draft strategic plan at each stage. They also have to make sure that every member of COABC has an opportunity for input through feedback on the COABC email listserv (see box for one way to get an email account). We are also hoping to have local (neighbourhood) meetings over the summer to make it easy for you to give your input to this process.

The process of consultation with "the industry"-farmers, processors, distributors, and, of course, representatives of the Federal Government which is providing the funds and the Provincial Government which is overseeing them - began with the Committee, plus reps from each CB and the COABC contract staff, in a facilitated visioning session on June 11-13th.

Despite the diversity of interests at the table, the group was able to define some guiding principles and values; to name some important goals for organics in BC in the next five years, to identify some of the challenges we face, and to suggest some strategies and potential partners. A "wish list" included resolution of issues within the standards (including fenceposts!), an organic breeding program, an organic seed industry, an organic apprenticeship program, a thriving communication network internally in

COABC and with academics and industry partners - and much more. This is important work and will be of value to us regardless of the disposition of the Trust Fund.

One problem with the Trust Fund is that the million dollars needs to be matched with \$1 million from other sources, some of which can be "in kind". Some projects could receive a higher percentage of Trust funds (e.g. research or public education), which would be balanced by lower allocations to other projects (e.g. projects which are primarily private business/farm development).

How to get a hotmail address:

First of all, turn on your computer and go on-line to the World Wide Web. If you don't have a computer and a modem, go to your local library and sign up for a computer access time. The computers at the library are usually on so when it is your access time, ask the librarian to help you onto the Internet. Once on the Internet, type in <www.hotmail.com> in the location box. This will take you to the hotmail website. Once there, click on "New user? Sign up now!" When you have clicked on that box, a bunch of questions will show up. Fill in the answers and press "Sign up" box when you are finished. Congratulations! You have a free hotmail account. If you don't use it very often, you may have to re-register. Inactive hotmail accounts are closed after two months.

John Gunner

The Strategic Plan will, among other details, lay out the proportion of matching funds for different types of project. Over the next two months, Andrea will flesh out the results of the Winfield meeting with information on organic sector size and growth, food trends in Canada, U.S.A., Europe and Asia and organic certification standards in these areas. She will then present a draft to the steering committee for review and feedback. She will then present us with a statement of goals and accompanying strategies, identification of partners, budgets and funding options. The final stage will be developing and deciding on options for structuring and using the Trust Fund monies. Our goal is mid-September for completion of the Strategic Plan.

Please contact Andrea or a Committee member to arrange a meeting, express your comments/concerns, or get more information.

Contact Andrea Gunner at agunner@junction.net or telephone 250-546-2712 or fax 250-546-2713. ✓



Linda Edwards and a group of representatives from CBs and provincial and federal governments hard at work on "strategic objectives" for COABC.



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