



# HORT SNACKS

---

Welcome to another edition of Hort Snacks. In grand tradition, let's start with a discussion of the weather. If this was April or even March, I'd be feeling pretty good about the spring-like temperatures and light to below-average levels of precipitation that have been the norm throughout the past couple of months. However, with it being January, it is a bit alarming and concerning. There is the distinct possibility that there will be moderate to significant winter injury in a number of perennial horticulture crops, including the bush fruits and berries. Our fruit crops are tried and tested in extreme cold winter conditions, but less often in fluctuating winters. Two things that might weigh in favour of reduced injury levels include; 1) a protective layer of straw on the strawberries (applied in October, once things went dormant, prior to significant cold periods) and; 2) the chance that the crops potentially were still sitting in the deepest and "earliest" stage of dormancy, rather than a later stage (such as in late winter or early spring) when the warm snaps have been coming and going. It would be worth watching the bud break in your crops and carefully and thoroughly assessing the emergence and level of injury that is present.

With spring approaching, you'll find a few things in this edition to get you thinking and planning. One is a completed tentative agenda for the perennial Alberta Farm Fresh Local Food Short Course 2012 (a.k.a. Berry & Vegetable School). Our agenda is full of great speakers and interesting sessions. Well worth taking a couple days to catch up on current topics, network with your peers and share, share, share. You'll also find some articles and links, as well as a few other items to keep your mental processes churning.

Hopefully we'll have a chance to catch up sometime this spring. Feel free to drop a question or comment, suggestion for an article topic or just share what you are planning this summer.

Rob Spencer, Commercial Horticulture Specialist  
 Alberta Ag-Info Centre, Alberta Agriculture and Rural Development  
 310-FARM (3276)

### *In this edition of Hort Snacks*

▪ Interesting News & Articles	.....1
▪ Things to do / Things to think about	.....2
▪ STOPDED reminder	.....2
▪ Upcoming Conferences / Workshops	.....3
▪ Q&A	.....3
▪ Mental Snacktime – Understanding	.....3
▪ Considerations for the Selection of Horticulture Crop Varieties	.....4
▪ Insect of the Month – Beet Webworm	.....6
▪ Disease of the Month – Pythium Root Rots	.....7
▪ AFFLFSC 2012 – Tentative Agenda	.....8

### Interesting News & Articles

[Set yourself up for Succession](#) – Fruit Growers News article

[Mulching for Weed Management in Organic Vegetable Production](#) – eXtension article

[Manage the Weed Seed Bank – Minimize “Deposits” and Maximize “Withdrawals”](#) – eXtension article

[Heads-Up of the Top 6](#) – Spud Smart article

[Wireworm control in Horticultural Crops](#) – PEI ADAPT Council article in Dec 22, 2011 edition

## THINGS TO DO / THINGS TO THINK ABOUT THIS MONTH

- Plan to attend winter workshops / courses. At the same time, think about visiting another operation this summer (or attending some field day or workshop)
- Register for Berry & Vegetable School (agenda attached) – connect with fellow producers, get answers and ideas and share your own thoughts with others
- Plan field layout of fields to be planted
- Check / Clean / Maintain Equipment
  - irrigation connections, nozzles, filters, pump injectors
  - sprayer nozzles, pumps, filters, lines, etc.
  - planters, seeders, etc.
  - harvesters and tractors
- Check / Update signage
- Finalise plans and dates for advertising during season
- Plan for planting equipment and labour
  
- Prune Saskatoon berries (as able)
- Prune or mow primocane raspberry plants to the ground (as soon as can get to)
- Continue to monitor strawberry plant winter survival. Order extra if necessary.
  
- Ensure memberships in organizations are up to date (inclusion in websites, guides, etc.)
- Review production record notebook
  - Fertilizer response?
  - Pesticide response/efficacy?
  - Application dates
  - Pesticide applicator license update?
- Roundtable discussion with everyone involved in your operation
  - Review errors – irrigation, fertilizer, pest management, staffing
  - Collect ideas for improvement, whether it is diversification, streamlined processes, new and interesting ways to reach customers, whatever. Pick a couple to try out and put whoever contributed the idea in charge of it.
- Inventory
  - Pesticide / fertilizer storage – What do you have? Has anything expired? Does everything have the proper labels? Is everything stored correctly?
  - Containers – picking boxes, containers, pails, bags, etc.
- Complete order of fertilizer, pesticides, picking/packing containers, etc.

### Keep Alberta Dutch Elm Disease Free



<ul style="list-style-type: none"> <li>• Do not bring firewood into Alberta</li> <li>• Elm Pruning Ban is April 1 – September 30</li> <li>• Elm trees from a DED infected province can not be shipped into Alberta</li> </ul>	 <b>STOPDED</b> <small>SOCIETY TO PREVENT DUTCH ELM DISEASE</small>
---	--



For more information call 310-0000  
and ask for 403-782-8613

[www.STOPDED.org](http://www.STOPDED.org)

### Elm Pruning Ban in Alberta

- Pruning and sanitation is an essential part of Dutch Elm Disease prevention
- Pruning of elm trees is legal in Alberta from October 1 to March 31
- The disease vectors (European elm bark beetles) are not active between these dates
- Proper pruning is very important – consult a professional arborist to determine the nature and extent of pruning required

### NEWSLETTER USE RESTRICTIONS

Please feel free to share all or portions of this newsletter with other interested parties. If you want to use content from this newsletter in other media, please request permission before doing so.

## Upcoming Conferences / Workshops

### February 2012

- **Rock the Farm 2012**  
Feb 4, 2012 – Mayfield Inn & Suites – Edmonton, AB  
[www.fabb.ca/events](http://www.fabb.ca/events)
- **AgChoices 2012 – Understanding Global Influences: Keeping Alberta Competitive**  
Feb 7, 2012 – Holiday Inn 67<sup>th</sup> Street, Red Deer, AB  
Register by January 31 → 1-800-387-6030  
[www.agriculture.alberta.ca/agchoices](http://www.agriculture.alberta.ca/agchoices)
- **Canadian Food Summit 2012**  
Feb 7-8, 2012 – Metro Toronto Convention Centre – Toronto, ON  
[www.conferenceboard.ca/conf/12-0018/default.aspx](http://www.conferenceboard.ca/conf/12-0018/default.aspx)
- **Explore Local Foods / Local Markets Workshop**  
Feb 8, 2012 – Strathmore Travelodge – Strathmore, AB  
[www.explorelocal.ca](http://www.explorelocal.ca) → Events
- **Expand Local Foods Local Markets Workshop**  
Feb 9, 2012 – Lone Pine Community Hall – Didsbury, AB  
[www.explorelocal.ca](http://www.explorelocal.ca) → Events
- **2012 North American Farm Direct Marketing Association (NAFDMA) Convention**  
Feb 10-16, 2012 – Williamsburg Marriott – Williamsburg, Virginia  
[www.nafdma.com](http://www.nafdma.com)
- **Greenhouse Bedding Plant Workshop**  
Feb 15, 2012 – Crop Diversification Centre North – Edmonton, AB  
[www.agga.ca](http://www.agga.ca)
- **Alberta Gift Show**  
Feb 19-22, 2012 – Northlands EXPO Centre – Edmonton, AB  
<http://www.cgta.org/Giftshow/AB/Home.aspx>
- **Canadian Organic Science Conference**  
Feb 21-23, 2012 – Winnipeg, MB  
[www.oacc.ca/cosc](http://www.oacc.ca/cosc)
- **Ontario Fruit & Vegetable Convention**  
Feb 22-23, 2012 – Scotiabank Convention Centre – Niagara Falls, ON  
[www.ofvc.ca](http://www.ofvc.ca)
- **International Potato Technology Expo**  
Feb 24-25, 2012 – Charlottetown Civic Centre - Charlottetown, PEI  
[www.potatoexpo.ca](http://www.potatoexpo.ca)

## Upcoming Conferences / Workshops

### March 2012

- **Alien Invasive Species Forum**  
Mar 1, 2012 – Olds College – Olds, AB  
[www.oldscollege.ca/ais](http://www.oldscollege.ca/ais)
- **Alberta Farm Fresh Local Food Short Course 2012**  
Mar 1-2, 2012 – Black Knight Inn – Red Deer, AB  
[www.albertafarmfresh.com](http://www.albertafarmfresh.com)
- **2012 Northeast Potato Technology Forum**  
Mar 7-8, 2012 – Wells Conference Centre – U of Maine – Orono, Maine  
<http://www.northeastpotato.com/>
- **2011 Manitoba Direct Farm Marketing Conference**  
Mar 9-10, 2012 – Lakeview Resort & Conference Centre – Gimli, MB  
[www.directfarmmarketing.com](http://www.directfarmmarketing.com)
- **Canadian Horticultural Council (CHC) Annual Meeting**  
Mar 13-16, 2012 – Fairmont Château Laurier – Québec City, QC  
[www.hortcouncil.ca/](http://www.hortcouncil.ca/)
- **Canada Blooms 2012**  
Mar 16-25, 2012 – Direct Energy Centre – Toronto, ON  
[www.canadablooms.com](http://www.canadablooms.com)

### April 2012

- **12<sup>th</sup> Growing Rural Tourism**  
April 2-4, 2012 – Camrose Regional Exhibition – Camrose, AB  
[www.growingruraltourism.ca](http://www.growingruraltourism.ca)
- **Alberta Home Economists Association (AHEA) Conference**  
April 20-21, 2012 – Hilton Garden Inn West Edmonton – Edmonton, AB  
[www.aheda.ab.ca](http://www.aheda.ab.ca)
- **SAI Global Food Safety Symposium – Managing Change – Evolution or Revolution**  
April 12 (Toronto), April 26 (Montreal), May 3 (Vancouver)  
<http://www.saiglobal.com/Assurance/food-safety/food-safety-symposium.htm>



### MENTAL SNACKTIME

“To use the same words is not a sufficient guarantee of understanding; one must use the same words for the same genus of inward experience; ultimately one must have one’s experiences in common.” –

Friedrich Nietzsche

“Your pain is the breaking of the shell that encloses your understanding.” – Khalil Gibran

“Understanding is a two-way street.” – Eleanor Roosevelt

“The fact that you are willing to say, “I do not understand, and it is fine,” is the greatest understanding you could exhibit.” – Wayne Dyer

“The noblest pleasure is the joy of understanding.” – Leonardo da Vinci

### **Q: Variety Selection –**

#### **What criteria do you use to choose new “favourites”?**

**A:** Must have good taste/flavour; look good; grows well on our land/conditions

**A:** Usefulness

**A:** I’d always weigh how a new variety looks (by the description of its qualities/characteristics) against the maturity potential. I figure that the most important thing is a reasonable guarantee that it will bring in a minimal return, in terms of mature produce. If it doesn’t produce, why bother? – Rob Spencer (AARD)

**A:** I like the concept of trying a row or two of something new (seeded), preferably in a location that is reasonably indicative of the conditions it will have to grow in. It should probably not be on the edge of the field or maybe it should be in a couple different locations. For transplanted crops, maybe a tray or two is sufficient, with similar placement to direct seeded crops. For anything that goes into the field, make sure you know where it is, so you can compare it. Sometimes things tend to blend/blur together during “testing”, making final evaluation difficult. – Rob Spencer (AARD)

**Next Month’s ? → [On-Farm Testing & Evaluation – What are your experiences – Pros & Cons?](#)**

## Considerations in the Selection of Horticulture Crop Varieties

Fruit and vegetable crop producers have the opportunity and the challenge of deciding what they are going to grow, when they start an enterprise, annually for many of their crops, or throughout the lifespan of their business. Within the crops that are selected, there is a wide degree of variation in the varieties and cultivars that producers can choose from, both for crop and varietal diversity, as well as a component of their production management toolbox. Some of the factors that might influence that decision-making process are:

- **Market demand**

Ultimately, this should be at the heart or root of any business decision. Producers should conduct market research to determine that there is, in fact, a market for their proposed product. The more that producers understand the subtle nuances of their market(s), the greater opportunity there is for them to make careful and appropriate selections within the specific crop group. They can tailor their production in the short, medium and long term, based on what they know of their market. They can also make changes or adjustments as their operation matures.

- **Customer demands / preferences**

Customers come in all shapes, sizes and temperaments: short or tall, male or female, aggressive and timid. Add to that the fact that they come from an extremely diverse range of backgrounds, representing ethnic, cultural, social, and geographic differences. Mix in family and economic variables and you have a challenge (and an opportunity). Since customers comprise your target market, their likes and dislikes should weigh into what you produce. This might mean that you grow a certain amount of a specific variety of cabbage for the Ukrainian *babas* in your area or that you have a selection of fresh herbs, ethnic vegetables or certain varieties of potatoes for those of other ethnic backgrounds. You might grow a few extra choices for sale at the market. That being said, you can also choose to ignore customers' demands, specifically when they conflict with other, more practical factors, such as the ability to actually grow what they want (e.g. watermelons) or incompatibility with production practices or a lack of specialized equipment.

- **Grower preferences / experience**

While there might be demand for a wide range of products, not everyone wants to grow everything, due to limitations of space, equipment, etc. Some producers want to specialize in specific crops or, based on the research and work that they have done, they have decided to grow certain things. Experience plays a role as well. Trying the same thing over and over in the same way and expecting different results is the definition of insanity. Based on what you've tried or experienced, you will make changes to what you grow, both at a fine-detail level (e.g. Bolero vs. Scarlet Nantes carrots) and in broad terms (Saskatoon berries vs. raspberries or fruit vs. vegetables). In all arenas of life, there are some things that you accept and deal with, because the pain in your ... elbow is worth the trouble. Sometimes it just isn't worth the effort, the cost or the headache. It is okay to lay down that line.

- **Suitability for production on their farm, in their climate, soil, etc.**

Some crops will not thrive in certain climates, on certain soil types or due to a range of other factors. The length of the growing season, the frost free period, the number of heat units, and any number of other things will limit production and narrow down your choices somewhat. Any new annual crop will have to pass through this "reality" filter. If something is of borderline hardiness or suitability, you will have to decide to make adjustments to increase the likelihood of success (e.g. microclimate modification, etc).

- **Availability (seasonal and long-term) from suppliers**

Sometimes, even if you have demand, desire and a suitable environment, you are limited by supply of propagation materials. Varieties and cultivars are often phased out or removed from circulation by propagators and breeders. Climatic and environmental factors in other regions can affect the availability of seeds or plant material from one season to the next. This will require flexibility and adaptability (and often patience) on the part of the producer. It is also a strong case-maker for trying new things and adding a few different baskets for your eggs.

- **Disease or insect pest pressures**

Some crops (and varieties and cultivars within the groups) are more susceptible or resistant to the attack of pests. As pests and pest pressures change, some adjustment will be required. If you consistently deal with a pest, it is possible that selecting a more resistant variety will help. On the other hand, some crops may become impossible to grow within a certain production management scheme (e.g. organic) or the input costs may make it unprofitable to continue to grow certain things.

- **Product end-use variables**

How a product is going to be used (by you or your buyers/customers) will influence your choices of crops and the varieties cultivars within those groups. Some varieties are better suited to storage and might be selected as one way of stretching out your product availability. Some varieties are best suited to U-pick harvesting, rather than mechanical harvesting (e.g. Thiessen vs. Northline Saskatoon berries). Others simply taste or perform better in different end uses.

- **Production management factors (timing and spread of harvest)**

In order to successfully manage the production cycle, by spreading out the harvest season (and produce availability) producers have the chance to make adjustments using the crops (and the specific varieties or cultivars) that they select. By choosing varieties that are short, medium and long season, they can plant all at once, but have multiple harvests. They can schedule their harvest season. At the same time, considering when a crop will mature will be a part of other considerations (such as end use, customer demand, etc.).

### **In Conclusion:**

In general terms, here are some tips to consider when selecting varieties

- Try one or 2 different varieties or cultivars that resemble in most ways, the standard varieties that you grow. Then, if availability shifts, you have other choices.
- Do your research. Talk to colleagues, seed representatives or other resources at your disposal to gather as much information on new or different varieties that you can.
- Seed catalogues are great and pretty, but due to space, don't always provide a lot of detailed information. Develop a relationship with the seed representative, so that they can fill in the gaps.
- Test new stuff for at least a couple of years before making a decision, as some varieties are pretty flexible and will perform across the climatic spectrum, whereas others only shine in good conditions. Better to know that beforehand.
- Collect as much useful data as possible on the things that you are testing. It can be time-consuming, but if you are able to either assign it to a trusted employee or make it a priority, more information is better than less. If you are limited for time, prioritize what sorts of things you want to know and dedicate more time at that stage (e.g. how does the variety perform in fluctuating spring conditions – cool, wet or cool, dry).
- Take a small risk each year, with some measure of control, rather than being forced to take a huge risk because of conditions that are pushed on you.
- Make the most of your test material. Get your customers to try out what you are growing and let them weigh in on what works from a saleable standpoint. Be sure to offer comparative material.
- Look at the testing and selecting of new varieties as an opportunity, rather than a chore.

### **Related Articles / Factsheets**

[Choosing Vegetable Varieties – FAQ](#)

[University of Saskatchewan Vegetable Research Program](#)



## Beet Webworm

*Loxostege sticticalis*

**Crops Affected:** beets, peas, potatoes, spinach, cabbage, lettuce, onions, asparagus, Lamb's quarters, Russian thistle, sugar beets, canola, alfalfa, mustard, sweet clover, flax

### Life Cycle:

- Larvae overwinter in the soil in tubular, silk-lined cells, pupating in late spring
- A first generation of adult moths emerge in late May through to early July
- Adult moths
  - 20mm in length and 25mm across, with a triangular shape when at rest
  - grey-brown with straw/tan coloured markings
  - have a distinctive white margin on the ends of the wings
- Moths are active at night, hiding during the day unless disturbed
- Eggs are laid on the underside of plant leaves
- 1<sup>st</sup> generation larvae begin to emerge in late June to early July
- Larvae
  - Initially small and pale green
  - Grow to become 25-40mm in length (1-1.25in), olive green, becoming black
  - Mature larvae have 2 white/cream coloured stripes on either side of the centre line, with a double row of paired circular marks down each side of the body
- Once larvae mature, they drop to the soil, spin a tubular cocoon and pupate below the soil surface
- 2<sup>nd</sup> generation moths emerge from July to September
  - Larvae from 2<sup>nd</sup> generation moths feed and overwinter

### Symptoms:

- Larvae feed on leaves, stems, pods and buds
- Feeding creates a whitish appearance of surface tissues, as tissues are stripped
- Feeding on the undersides of leaves creates holes, with eventually only the larger vein tissues remaining intact
- Larvae may drop on a silk thread when disturbed
- Leaves and petioles may be rolled and tied together with webbing

### Monitoring:

- Economic thresholds are not available for vegetable crops; for field crops, most thresholds follow that of the Bertha Armyworm

### Management:

- A number of beneficial parasitic insects are present and will keep most population outbreaks in check
- Chemical controls are available to control larvae when they are young, prior to significant web formation
- Control weeds in and around fields
- Removing webbed leaves (and larvae within) can be effective on a small scale

[Pest Management  
Regulatory Agency  
\(PMRA\) –  
Electronic Label Search  
Engine](#)  
Search the database for  
electronic labels

**Rob Spencer, BSA, MSc, P.Ag.**  
**Commercial Horticulture Specialist**

**robert.spencer@gov.ab.ca**

Alberta Ag-Info Centre

**310-FARM** (3276)

FAX: 403-742-7527

## Pythium Root Rots

*Range of Pythium spp.*

### Crops Affected:

Range of crops – fruits (strawberry, raspberry, etc.) and vegetables (beets, Swiss chard, spinach, carrots, cruciferous/Cole crops (cabbage, broccoli, cauliflower, radish, and rutabaga/turnip), cucurbit crops (cucumber, squash, pumpkin, and melons), peas, beans

### Disease Cycle:

- Pythium species inhabit the soil, surviving as mycelium (short term), sporangia (medium term) or oospores (for long periods of time)
- Pathogens attack younger and more tender tissues of host plants
  - Can also survive for a time on plant roots or organic matter, if conditions are suitable
- Oospores germinate in the presence of plant roots
- Pathogens often occur in conjunction with other soil borne pathogens (*Rhizoctonia*, *Fusarium*, *Phoma*, etc.) or as multiple species

### Symptoms:

#### Foliar

- Pre or post-emergence damping off in annual crops, depending on soil conditions
- A softening of the stem may be observed, followed by the development of dark, water-soaked spots on the emerging seedling at the soil line
  - Plants may topple over
- Lower leaves may exhibit wilting, yellowing and water-soaked rots at the bases of the leaf petioles
- In perennial plants, plants may appear to be suffering from lack of moisture or nutrients but do not respond to addition of water or nutrients
  - Leaf size may be reduced, with leaves and petioles small/shorter and may become wilted or discoloured
  - Reduction in vigour and general plant health
  - Few strawberry runners are produced

#### Seeds

- Seeds may rot and may be covered with a whitish-grey mould

#### Roots

- Roots may develop post-emergence light brown, depressed, water-soaked lesions which then develop together
  - The primary tap root of carrots may be inhibited and a number of long lateral roots may occur; tap root quality may be affected
- Extensive death of feeder roots and deterioration & blackening of structural roots
  - Root and rootlet development is sparse or nil

### Conditions Favouring Disease:

- Waterlogged / Poorly drained soils
- Cool soils
- Excess moisture
- Different species prefer different temperature ranges, although many prefer cooler or moderate conditions

### Management:

- Ensure site location is suitable, with well-drained soils
  - Avoid over watering or waterlogged soils
- Plant into warmer soils (over 15°C)
- Use clean, disease-free, planting stock and healthy, well-rooted plants
- Remove infected plants, if necessary
- Follow recommended growing practices (crop rotations, fertilizer & water use)
  - Prevent plant stress
- Control insect pests and weeds
- Follow a crop rotation, rotating out of crop periodically, if disease develops
- Registered seed treatments may be effective for protecting plants from seed decay and damping off

*Day 1: Thursday, March 1, 2012*

Stream 1 – Introductory Fruit	Stream 2 – Advanced Fruit	Stream 3 – Protein
8:00 – 8:15 am – Welcome & Introduction – (Rob Spencer – AARD)		
8:15 – 9:00 am – Making Sure Your Farm Is Market Ready – (Tam Andersen – Prairie Gardens & Adventure Centre)		
9 – 10 am – Intro to Direct Marketing – Business Start Up – (Kathy Bosse – AARD)	9 – 10 am – Strawberry Varieties – (Blaine Staples – The Jungle Farm)	9 – 10 am – Poultry 101 – (Bert Dening – AARD)
10:10-15 am – Coffee Break		
10:15 – 11:45 – Introductory Strawberry Production – (Lloyd Hausher – L&A Enterprises)	10:15 – 11:15 am – Emerging Fruit Pest Issues – (Rob Spencer – AARD)	10:15 – 11:15 am – Financial Assistance – (Doug Wilson - FCC)
11:45 – 12:15 – Strawberry Production – Grower – (Linda Brundige – Lynn Rob Strawberries Market Garden)	11:15 – 12:15 pm – Using Electronic/Social Media Effectively – (Leona Staples – The Jungle Farm / Tam Andersen – Prairie Gardens & Adventure Centre)	11:15 – 12:15 – Growing Forward Programs – Unravelling the Mystery (Jeff Millang & Kathy Bosse – AARD)
12:15 – 1 pm – LUNCH		
1 – 2 pm – Introductory Raspberry Production – (Lloyd Hausher – L&A Enterprises)	1 – 3 pm – CSAs – Panel Discussion (Tamara Taylor – Ravenwood Ranch, Yolande Stark – Tipi Creek Farm, Anita Gregoire – On Borrowed Ground)	
2 – 3 pm – Introductory Saskatoon Berry Production – (Lloyd Hausher – L&A Enterprises)		
3 – 3:30 – Coffee Break		
3:30 – 4 pm – Saskatoon Berry Production – Grower – (Russ & Tonia White – Pipestone Berry Farm)	3:30 – 5 pm – Agri-Tourism Options – Panel Discussion – (Tam Andersen – Prairie Gardens & Adventure Centre / Judy & Claude Kolk – Kayben Farms)	3:30 – 5 pm – Packaging & Labelling Rules – Protein / Value Added Products – (Carol Thompson – CFIA)
4 – 5 pm – Fruit Pests – (Rob Spencer – AARD)		

6 – 7 PM – Alberta Farm Fresh Producers Association (AFFPA) Annual General Meeting

7 – 8+ PM – Facilitated Bear Pit Session

*Day 2: Friday, March 2, 2012*

Stream 1 – Introductory Vegetables	Stream 2 – Advanced Vegetables	Stream 3 - Protein
8:00 – 8:20 am – Welcome & Introduction – (Rob Spencer – AARD)		
8:20 – 9:00 am – Legal Water Use - Water Licensing – (Andrew Patton – Alberta Environment)		
9 – 10 am – Intro to Direct Marketing – Business Start Up – (Kathy Bosse – AARD)	9 – 10 am – Preserving & Enhancing the Health of Soil – (Dr. Doug Waterer – U of S)	9 – 10 am – On-Farm Business Insurance – (Robert Fiume – Capri Insurance)
10:10-15 am – Coffee Break		
10:15 – 12:15 – Introductory Vegetable Production Part I – (Rob Spencer – AARD)	10:15 – 11:15 am – Post-harvest Handling of Vegetables and Fruit – (Dr. Doug Waterer – U of S)	10:15 – 11:15 am – AgriTourism and Animals – (Carolyn Saumer – Saumer Time Alpaca Ranch)
	11:15 – 12:15 – The In's & Out's of Setting Prices – (Kathy Bosse – AARD)	11:15 – 12:15 – Transporting & Handling Meat Products – (Dan Richen – Alberta Health Services)
12:15 – 1 pm – LUNCH		
1 – 3 pm – Introductory Vegetable Production Part II – (Rob Spencer – AARD)	1 – 2 pm – Organic Pest Management – (Dr. Ken Fry – Olds College)	1 – 2 pm – Basic Meat Shop / Processing Equipment – (Bert Dening – AARD)
	2 – 3 pm – On-Farm Food Safety – (Betty Vladicka – AARD)	2 – 3 pm – Grass Finished Livestock – (Bert Dening – AARD)
3 – 3:30 – Coffee Break		
3:30 – 4 pm – Vegetable Production – Grower – (Claude Kolk – Kayben Farms)	3:30 – 5 pm – Vegetable Seed/Variety Update – (Leah Erickson – Stokes Seeds; Ernie Szucs – Siegers Seed Co.)	3:30 – 5 pm – Direct Marketed Protein – Panel Discussion – (Nicola Irving – Irvings Farm Fresh; Tim Hoven – Hoven Farms; Other - TBD)
4 – 5 pm – Vegetable Pests – (Rob Spencer – AARD)		

5 pm – Conference closes

**For registration details (forms, prices, etc.) – contact Alberta Farm Fresh Producers Association (AFFPA)  
1-800-661-2642      [www.albertafarmfresh.com/info.htm](http://www.albertafarmfresh.com/info.htm)**

**Alberta Farm Fresh Local Food Short Course 2012 – Black Knight Inn, Red Deer, AB  
Tentative Agenda  
Day 1: Thursday, March 1, 2012**

Stream 1 – Introductory Fruit	Stream 2 – Advanced Fruit	Stream 3 – Protein
8:00 – 8:15 am – Welcome & Introduction – (Rob Spencer – AARD)		
<ul style="list-style-type: none"> <li>• Housekeeping items</li> </ul>		
8:15 – 9:00 am – Making Sure Your Farm Is Market Ready – (Tam Andersen – Prairie Gardens & Adventure Farm)		
9 – 10 am – <i>Intro to Direct Marketing – Business Start Up – (Kathy Bosse – AARD)</i>	9 – 10 am – <i>Strawberry Varieties – (Blaine Staples – The Jungle Farm)</i>	9 – 10 am – <i>Poultry 101 – (Bert Dening – AARD)</i>
<ul style="list-style-type: none"> <li>• What is involved in starting up a direct market fruit business?</li> <li>• What market channels are available &amp; how to choose one</li> <li>• Basic Economics and Pricing</li> </ul>	<ul style="list-style-type: none"> <li>• June Bearing / Day Neutral options</li> <li>• Examples from across N Am</li> <li>• Pros/Cons</li> </ul>	<ul style="list-style-type: none"> <li>• ???</li> </ul>
<i>10-10:15 am – Coffee Break</i>		
10:15 – 11:45 – <i>Introductory Strawberry Production – (Lloyd Hausher – L&amp;A Enterprises)</i>	10:15 – 11:15 am – <i>Emerging Fruit Pest Issues (Rob Spencer – AARD)</i>	10:15 – 11:15 am – <i>Financial Assistance (Doug Wilson – FCC)</i>
<ul style="list-style-type: none"> <li>• Overview of June bearing &amp; Day neutral strawberry production</li> <li>• Seasonal production activities (planting, establishment, renovation, maintenance)</li> <li>• Management – fertility, irrigation, site selection and layout</li> <li>• Variety options and selection</li> </ul>	<ul style="list-style-type: none"> <li>• Spotted Wing Drosophila</li> <li>• Cherry Blossom Blight, etc.</li> <li>• What to watch for?</li> </ul>	<ul style="list-style-type: none"> <li>• What to take to the bank?</li> <li>• Options</li> <li>• For Fruit/Veg/Protein Producers</li> </ul>
	11:15 – 12:15 pm – <i>Using Electronic/Social Media Effectively (Leona Staples – The Jungle Farm / Tam Andersen – Prairie Gardens &amp; Adventure Farm)</i>	11:15 – 12:15 – <i>Growing Forward Programs – Unravelling the Mystery (Jeff Millang &amp; Kathy Bosse – AARD)</i>
11:45 – 12:15 – <i>Strawberry Production – Grower – (Linda Brundige – Lynn Rob Strawberries Market Garden)</i>	<ul style="list-style-type: none"> <li>• Practical examples</li> <li>• Newsletters, blogging, Facebook / Twitter, etc.</li> <li>• Etc</li> </ul>	
<ul style="list-style-type: none"> <li>• Lessons Learned → 5-10 Things You Should Do or Avoid Doing</li> </ul>		
<i>12:15 – 1 pm – LUNCH</i>		
1 – 2 pm – <i>Introductory Raspberry Production – (Lloyd Hausher – L&amp;A Enterprises)</i>	1 – 3 pm – <i>CSAs – Panel Discussion (Tamara Taylor – Ravenwood Ranch, Yolande Stark – Tipi Creek Farm, Anita Gregoire – On Borrowed Ground)</i>	
<ul style="list-style-type: none"> <li>• Overview of florican and primocane raspberry production</li> <li>• Seasonal production activities (planting, establishment, maintenance)</li> <li>• Management – fertility, irrigation, site selection and layout</li> <li>• Variety options and selection</li> </ul>	<ul style="list-style-type: none"> <li>• Different examples of size, scale, how they are run</li> <li>• Lessons learned from each example</li> <li>• Discussion opportunities</li> </ul>	

<p><b>2 – 3 pm – Introductory Saskatoon Berry Production – (Lloyd Hausher – L&amp;A Enterprises)</b></p> <ul style="list-style-type: none"> <li>• Overview of Saskatoon berry production</li> <li>• Seasonal production activities (planting, establishment, maintenance)</li> <li>• Management – fertility, irrigation, site selection and layout</li> <li>• Variety options and selection</li> </ul>		
<p><b>3 – 3:30 – Coffee Break</b></p>		
<p><b>3:30 – 4 pm – Saskatoon Berry Production – Grower – (Russ &amp; Tonia White – Pipestone Berry Farm)</b></p> <ul style="list-style-type: none"> <li>• Lessons Learned – 5-10 Things You Should Do or Avoid Doing</li> </ul>	<p><b>3:30 – 5 pm – Agri-Tourism Options – Panel Discussion – (Tam Andersen – Prairie Gardens &amp; Adventure Farm / Judy &amp; Claude Kolk – Kayben Farms)</b></p> <ul style="list-style-type: none"> <li>• Real world examples</li> <li>• What to watch for &amp;/or avoid</li> </ul>	<p><b>3:30 – 5 pm – Packaging &amp; Labelling Rules – Protein / Value Added Products – (Carol Thompson – CFIA)</b></p> <ul style="list-style-type: none"> <li>• Rules and regulations</li> <li>• Examples</li> <li>• For FRUIT/VEG/PROTEIN Producers</li> </ul>
<p><b>4 – 5 pm – Fruit Pests – (Rob Spencer – AARD)</b></p> <ul style="list-style-type: none"> <li>• General pest management practices</li> <li>• Main pests of strawberries, raspberries and Saskatoon berries</li> <li>• Symptoms, life cycle and management practices for each pest</li> </ul>		

6 – 7 PM – Alberta Farm Fresh Producers Association (AFFPA) Annual General Meeting

7 – 8+ PM – Facilitated Bear Pit Session

**Day 2: Friday, March 2, 2012**

Stream 1 – Introductory Vegetables	Stream 2 – Advanced Vegetables	Stream 3 - Protein
<p><b>8:00 – 8:20 am – Welcome &amp; Introduction – (Rob Spencer – AARD)</b></p> <ul style="list-style-type: none"> <li>• Housekeeping items</li> </ul>		
<p><b>8:20 – 9:00 am – Legal Water Use - Water Licensing – (Andrew Patton – Alberta Environment)</b></p>		
<p><b>9 – 10 am – Intro to Direct Marketing – Business Start Up – (Kathy Bosse – AARD)</b></p> <ul style="list-style-type: none"> <li>• What is involved in starting up a direct market fruit business?</li> <li>• What market channels are available &amp; how to choose one</li> <li>• Basic Economics and Pricing</li> </ul>	<p><b>9 – 10 am – Preserving &amp; Enhancing the Health of Soil – (Dr. Doug Waterer – U of Saskatchewan)</b></p> <ul style="list-style-type: none"> <li>• Tillage</li> <li>• Cover Crops</li> <li>• Etc.</li> </ul>	<p><b>9 – 10 am – On-Farm Business Insurance – (Robert Fiume – Capri Insurance)</b></p> <ul style="list-style-type: none"> <li>• JOINT SESSION WITH INTRO VEG</li> </ul>
<p><b>10-10:15 am – Coffee Break</b></p>		

<p><b>10:15 – 12:15 – <i>Introductory Vegetable Production Part I – (Rob Spencer – AARD)</i></b></p> <ul style="list-style-type: none"> <li>• Site Selection</li> <li>• Soils / Soil Fertility Requirements</li> <li>• Soil Preparation</li> <li>• Water / Irrigation – quality, systems, water use requirements</li> <li>• Crop / Variety selection – factors, options, etc.</li> </ul>	<p><b>10:15 – 11:15 am – <i>Post-harvest Handling of Vegetables and Fruit (Dr. Doug Waterer – U of Saskatchewan)</i></b></p> <ul style="list-style-type: none"> <li>• Specific representative groups and storage options</li> <li>• Varieties, climate control, etc.</li> </ul>	<p><b>10:15 – 11:15 am – <i>AgriTourism and Animals (Carolynne Saumer – Saumer Time Alpaca Ranch)</i></b></p> <ul style="list-style-type: none"> <li>• Rules</li> <li>• Options</li> <li>• Lessons learned?</li> </ul>
	<p><b>11:15 – 12:15 – <i>The In's &amp; Out's of Setting Prices (Kathy Bosse – AARD)</i></b></p> <ul style="list-style-type: none"> <li>• What to consider?</li> <li>• What is involved?</li> <li>• Some benchmarks to reference</li> </ul>	<p><b>11:15 – 12:15 – <i>Transporting &amp; Handling Meat Products (Dan Richen – Alberta Health Services)</i></b></p> <ul style="list-style-type: none"> <li>• Safety?</li> <li>• Good practices?</li> </ul>
<b>12:15 – 1 pm – LUNCH</b>		
<p><b>1 – 3 pm – <i>Introductory Vegetable Production Part II – (Rob Spencer – AARD)</i></b></p> <ul style="list-style-type: none"> <li>• Planting / Crop Production</li> <li>• Growing Season Extension – transplants, plasticulture, etc.</li> <li>• Harvest / Post Harvest – crop requirements</li> <li>• Pest Management – principles, scouting/diagnostics, general pest management</li> </ul>	<p><b>1 – 2 pm – <i>Organic Pest Management – (Dr. Ken Fry – Olds College)</i></b></p> <ul style="list-style-type: none"> <li>• Encouraging or recognizing natural predators, etc</li> <li>• Dealing with pests in other ways</li> </ul>	<p><b>1 – 2 pm – <i>Basic Meat Shop / Processing Equipment – (Bert Dening – AARD)</i></b></p> <ul style="list-style-type: none"> <li>• Meat equipment</li> <li>• Sausage making / processing</li> </ul>
	<p><b>2 – 3 pm – <i>On-Farm Food Safety ( Betty Vladicka – AARD)</i></b></p> <ul style="list-style-type: none"> <li>• Practical tips</li> <li>• Programs &amp; Resources</li> </ul>	<p><b>2 – 3 pm – <i>Grass Finished Livestock – (Bert Dening – AARD)</i></b></p> <ul style="list-style-type: none"> <li>• Beef, poultry &amp; pigs</li> <li>• Free-range</li> </ul>
<b>3 – 3:30 – Coffee Break</b>		
<p><b>3:30 – 4 pm – <i>Vegetable Growing – Grower – (Claude Kolk – Kayben Farms)</i></b></p> <ul style="list-style-type: none"> <li>• Lessons Learned – 5-10 Things You Should Do or Avoid Doing</li> </ul>	<p><b>3:30 – 5 pm – <i>Vegetable Seed/Variety Update – (Leah Erickson – Stokes Seeds; Ernie Szucs – Siegers Seed Co.)</i></b></p> <ul style="list-style-type: none"> <li>• New &amp; Upcoming varieties</li> </ul>	<p><b>3:30 – 5 pm – <i>Direct Marketed Protein – Panel Discussion – (Nicola Irving – Irvings Farm Fresh; Tim Hoven – Hoven Farms; Other - TBD)</i></b></p> <ul style="list-style-type: none"> <li>• Different options &amp; experiences</li> </ul>
<p><b>4 – 5 pm – <i>Vegetable Pests – (Rob Spencer – AARD)</i></b></p> <ul style="list-style-type: none"> <li>• General pest management practices</li> <li>• Common pests of various vegetable crops</li> <li>• Symptoms, disease/life cycle and management practices for each pest</li> </ul>		

5 pm – Conference closes