

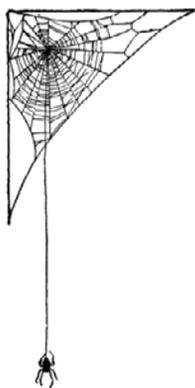


Welcome to another edition of Hort Snacks. It seems unfair that the summer can fly by so quickly. I'm sure that your days are full of tasks, all vying for attention and top priority. While I know that many of my days are slow and easy-going compared to yours, there are lots of times when a few more hours of daylight feel necessary. It can be challenging to maintain this feverish pace. Take care of yourselves.

In this edition, some of the focus of the materials is on working with the people that we surround ourselves with, which allows us to get everything done. This can be family members, full or part-time, permanent or seasonal staff, or even volunteers. However they came to be with you, keeping them happy, motivated and engaged is important. Hopefully some of the articles and tidbits will be of use to you. In addition to those articles, you'll also find information on some of the new (and already launched) Canadian Agricultural Partnership programs, plus some pests that pop up from time to time.

I hope that I can get out and see some of you. I'd love to visit all of you, but teleportation isn't progressing at the pace I'd like, so we'll have to rely on technology. Feel free to drop me a quick note from time to time to let me know how things are going vis-à-vis the growing season and the harvest. The better and clearer picture that I have of what is going on out there, the easier it is to understand what is needed.

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Featured Websites

Alberta Agriculture and Forestry
[Alberta Climate Information Service \(ACIS\) Mobile-friendly Weather App](#)

 Ag in the Classroom – [Learn about Agriculture info sheets](#)

In this edition of Hort Snacks

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THINGS TO DO / THINGS TO THINK ABOUT THIS MONTH

Strawberries

- 2nd nitrogen application should be made to June bearing strawberries mid-August - 15-20 lbs actual N/ac
- Continue to cultivate June bearers between rows (same direction) after harvest to ensure good aeration and incorporation of straw and decrease next year's disease and slug population
- Maintain uniform soil moisture to facilitate rooting of runners
- Continue nitrogen feeding of day-neutrals until end of August - 10-20 lbs actual N/ac/month applied in weekly or bi-monthly applications
- Apply field cooling to day-neutrals if temperatures remain high (over 30°C)
- Application of herbicides after harvest (June bearers) if quackgrass or other grass is a problem
- Application of herbicides before mid-August (after harvest) for control of hard-to-control broadleaf weeds (June bearers only)
- Line up a clean wheat or rye straw for a mulch supply. Run straw through the combine twice to reduce the number of weed seeds (or volunteer grain) in the straw or have it ammoniated (Note: ammoniation is a dangerous and costly process)

Raspberries

- Increase watering until harvest completion
- Continue irrigation after harvest to maintain growth of new canes
- Trellis primocane raspberry canes (if required)
- Cultivation between rows after harvest to break up compacted soil
- Delay spent cane removal on floricanes until September

Saskatoon Berries

- Prune diseased plants
- Remove non-species plants

Vegetables

- Continue to supply water through to crop maturity, particularly during the fruit filling or maturation process
- Small amounts of foliar nutrient applications may be required to maintain plant growth and health

General / Other

- Maintain good weed control (harbouring of disease and insect pests)
- Commence or complete harvest operations, ensuring crops are harvested carefully, at appropriate mature stages and cooled quickly to prolong post-harvest lifespan
- For most fruit crops, particularly tree or bush fruit, reduce the supply of water towards the middle of the month and do not water after the end of the month – watering can slow or prevent the onset of dormancy and can increase winter kill in some crops
 - e.g. Apples – will not shut down growth if water continues to be available

- Visit a fellow producer

Pest Monitoring / Management

- Continue to monitor for pests and diseases, controlling as required, remembering to adhere to Pre-Harvest Intervals
- Strawberries
 - Continue to monitor for Tarnished Plant Bug and apply appropriate control measures
- Raspberries
 - Control mites as required

In the News

- [Fungicides During Bloom — the Pollination Paradox](#) – Growing Produce article
- [Succession planning: What you need to know from a management consultant](#) – Family Farm Succession article
- [Automated Weeders Have Arrived in Vegetable Fields](#) – Growing Produce article
- [Tips for choosing a successor for the family farm](#) – Farm Family Succession article
- [YouTuber makes musical instruments out of produce](#) – HortiDaily article
- [Dehumidification – the silver bullet to energy costs?](#) – Greenhouse Canada article
- [Preventing heat stress](#) – Fruit & Vegetable article
- [Comparing traditional lighting with LED](#) – HortiDaily article
- [IPM is a powerful tool for potato growers](#) – SpudSmart article
- [Paint it Pink - Energy-generating glass saves water, boosts yields](#) – HortiDaily article
- [Weird new fruits could hit aisles soon thanks to gene-editing](#) – The Guardian article

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.

MENTAL SNACKTIME – Coaching

“Each person holds so much power within themselves that needs to be let out. Sometimes they just need a little nudge, a little direction, a little support, a little coaching, and the greatest things can happen.” – Pete Carroll

“To be successful in coaching you have to treat your team like a family. The leader needs backing from everyone.” – Morgan Wootten

“Coaching is very complex: it's like a puzzle, and many things need to come together to make it work.” – Stan Wawrinka

“To teach an academic subject is certainly not easy, but compared to coaching, it is. We can say 'two plus two is four' to every kid and be sure that we are right. But in coaching, we have to literally get to the soul of the people we are dealing with.” – Joe Paterno

“Constant, gentle pressure is my preferred technique for leadership, guidance, and coaching.” – Danny Meyer

“My best investment, as clichéd as this sounds, is the money I've spent developing myself, via books, workshops and coaching. Leadership begins within, and to have a better career, start by building a better you.” – Robin S. Sharma



Upcoming Conferences / Workshops

August 2018

- **North American Strawberry Growers Association (NASGA) Summer Tour**
Aug 14-15, 2018 – Watsonville, California, USA area
www.nasga.org
- **Farwest Show**
Aug 22-24, 2018 – Oregon Convention Centre – Portland, OR
<http://www.farwestshow.com/>
- **Independent Garden Center (IGC) Show 2018**
Aug 14-16, 2018 – Navy Pier Festival Hall – Chicago, Illinois, USA
<https://www.igcshow.com/>

September 2018

- **2018 Canada's Outdoor Farm Show**
Sept 11-13, 2018 – Woodstock, ON
www.outdoorfarmshow.com
- **CanWest Hort Expo**
Sept 26-27, 2018 – Tradex – Abbotsford, BC
www.canwesthortexpo.com
- **Potato Europe 2018**
Sept 12-13, 2018 – Rittergut Bockerode bei Hannover
<http://www.potatoeurope.com/>

October 2018

- **Canadian Greenhouse Conference**
October 3-4, 2018 – Scotiabank Convention Centre, Niagara Falls, ON
www.canadiangreenhouseconference.com
- **PMA Fresh Summit International Convention & Exposition**
October 18-20, 2018 – Orange County Convention Center, Orlando, Florida, USA
<http://www.freshsummit.com/>

Q: What is your best "people management" tip? (this could relate to staff, customers, etc.)

A: One thing we have noticed that can work for customers or staff if you give it a chance is: Listen – hear them out before you speak. Then you can determine whether they are coming from a place of misinformation, fear, or not knowing what your vision is. Maybe they just want to thank you for feeding them.

A: Find out what your staff's "why" is. Why do they do what they do, what is their passion, what is driving them.

A: Treating people with the respect they deserve both staff and customers seems to be the best

A: Respect everyone until they give you a reason not to

A: Practice what you preach. Keep smiling; it goes a long way.

A: Be consistent and firm.

A: Recognize who on your team is the best "people person" and who is not.

A: Be pleasant approachable watch your behavior and language.

A: Respect them, like them. They will probably be more willing to see things your way.

A: I think there are many as people come in all sizes and shapes when it comes to character. For staff keeping them engaged. Making their ideas a consideration so there is buy in. for customers: give them solutions.

Next Month's ? → [What do you feel is your role in informing/educating the public?](#)

Check your Elm Trees for Dutch Elm Disease (DED) Symptoms

By Janet Feddes-Calpas

Please help us prevent Dutch elm disease (DED) in Alberta. It is that time of year to be checking your elm trees for DED symptoms. A confirmed DED tree must be removed immediately to prevent further spread.

If an elm tree is infected with DED the leaves initially become wilted and soon will curl up, turn yellow and then brown. This is also referred to as flagging. Leaf symptoms are usually accompanied by brown staining under the bark. Symptoms begin in late spring or any time during the growing season. Suspicious elms must be tested in a STOPDED recognized lab for the presence of the fungus. Lab costs are covered by STOPDED.

This fatal fungus, which affects all species of elm trees in Alberta, clogs the elm tree's water conducting system and will cause the tree to die, usually within one or two seasons. The fungus is primarily spread from one tree to another by three species of insect vectors, the smaller European elm bark beetle (SEEBB), the native elm bark beetle (NEBB) and the banded elm bark beetle (BEBB). The beetles are attracted to weak and dying trees, which serve as breeding sites for the beetles. Once the beetles have pupated and turned into adults they leave the brood gallery and fly to healthy elms to feed, thus transporting the fungus on their bodies from one tree to the next. STOPDED monitors annually for the vectors throughout the province and both the SEEBB and BEBB have been found in various locations.

For this reason, it is important that elm firewood not be transported into or within Alberta as the wood may be harbouring the bark beetles. Firewood is confiscated at all the Alberta-Montana border crossings.

All elm trees that are showing DED symptoms must be reported immediately. To report symptoms or for more information call the toll free provincial STOPDED hotline by dialling 1-877-837-ELMS (3567). You can also visit our website at www.stoppeded.org

Canadian Agricultural Partnership (CAP) PROGRAMS

Have a look at the new Canadian Agricultural Partnership (CAP) Program website (www.cap.alberta.ca). CAP is a five-year, \$3 billion federal-provincial-territorial investment in the agriculture, agri-food and agri-based products sector. It is the successor of the 2013-18 Growing Forward 2 (GF2) partnership.

In Alberta, CAP represents a federal - provincial investment of \$406 million in strategic programs and initiatives for the agricultural sector. The roll-out of the CAP program suite in Alberta began in April, 2018, and will consist of a phased roll-out of 15 programs over the spring, summer and fall of 2018. Applications and program details consisting of cost-shares and eligible activities and/or items will be released with the opening of each program. The criteria for eligibility will be made available along with the program details.

Please note, there are some differences between CAP and GF2 programs, including many of the programs being merit-based (as opposed to 1st come/1st served), with specific intake periods staged throughout the year. Check each program for specifics.

In Alberta, CAP will deliver programs developed in consultation with stakeholders, and is organized under five themes: Environmental Sustainability and Climate Change; Products, Market Growth and Diversification; Science and Research; Risk Management; and Public Trust.

If you had subscribed to receive updates from the GF2 website, you will have to re-subscribe for updates from CAP. Click on the ORANGE button in the upper right of the CAP homepage, to subscribe.

www.cap.alberta.ca

As of August 1, 2018, details on 3 of the 5 themes of programs have been released and are open. The following programs are included:

Environmental Sustainability & Climate Change Theme

- Environmental Stewardship and Climate Change - Group
- Environmental Stewardship and Climate Change - Producer
- Farm Water Supply
- Irrigation Efficiency

Public Trust Theme

- Agriculture and Food Sustainability Assurance Initiatives
- Public Agriculture Literacy
- Youth Agriculture Education

Products, Market Growth and Diversification

- Products to Market
- Value-added Products to Market

[Pest Management Regulatory Agency \(PMRA\)](#) –

[Electronic Label Search Engine](#)

Search the database for electronic labels

People Management Tips

People are complicated. As convenient as it might be to have everyone act in a predictable way in each and every situation, I think that it would quickly become boring. Fortunately (or unfortunately), interactions with people (customers and/or staff) are never necessarily predictable or uniform. It requires considerable thought and effort for us to come through person-to-person interactions, with a (subjective) favourable or desirable outcome.

One of the keys to successfully managing human interactions is seeking and gaining **UNDERSTANDING**. Eleanor Roosevelt said "*Understanding is a two-way street*", while the Greek philosopher Plato said "*No law or ordinance is mightier than understanding.*"

Understanding doesn't just relate to knowing what is going on right at that moment, but also includes gathering any applicable background information. It is also important to understand the situation from the perspective of the other person (i.e. get the other side of the story). It is easy to make snap judgements and rulings based on a cursory, superficial glance, but it is wiser to invest an appropriate amount of time, listening, asking questions and then clarifying, so that you have a full and complete understanding. You can then employ empathy, sympathy, correct behaviors/mistakes, guide/mentor, comfort or whatever is necessary to ensure that both of you emerge from the interaction positively. Tibetan leader, Lobsang Tenzin, said "*Communication will bring understanding and understanding will cause harmonious mutual relationships which can establish peace and stability.*"

"When you really listen to another person from their point of view, and reflect back to them that understanding, it's like giving them emotional oxygen." – Stephen Covey

"The improvement of understanding is for two ends: first, our own increase of knowledge; secondly, to enable us to deliver that knowledge to others." – John Locke

Another key is really just a tool to gaining understanding, but since most humans are really good at it, it bears mentioning. **LISTENING**, truly effective listening, is critical if we are to understand people, as well as their needs and wants. It is an essential element of communication. Boy Scouts founder, Lord Robert Baden-Powell, taught "*If you make listening and observation your occupation you will gain much more than you can by talk.*" I'm not a big Trekkie, but William Shatner made an interesting observation about listening. He said "*Why does the lizard stick his tongue out? The lizard sticks its tongue out because that's the way it's listening and looking and tasting its environment. It's its means of appreciating what's in front of it.*"

"One of the most sincere forms of respect is actually listening to what another has to say." Bryant H. McGill

Personally, I think that **EXAMPLE** is one of the most powerful ways of managing people. I've always been a lead-from-the-front (or at least the upper middle) kind of person. I try and demonstrate what is important to me by what I do. I've always tried to show that if I am asking someone to do something, it's because I'm prepared to step up and do it myself, if necessary. If I'm asking someone to work alongside me, I'm actually going to work ahead of them as much as I can, not stand back and watch it get done. To me, example is a tangible demonstration of commitment, whether to a relationship, principles, or whatever it might be.

"One of the most important actions, things a leader can do, is to lead by example. If you want everyone else to be passionate, committed, dedicated, and motivated, you go first!" – Marshall Goldsmith

"In motivating people, you've got to engage their minds and their hearts. I motivate people, I hope, by example - and perhaps by excitement, by having productive ideas to make others feel involved." – Rupert Murdoch

There are volumes written on management people, from all sorts of perspectives. However, if you focus on being genuine, listen to understand and act in a way that is respectful, considerate and consistent, you'll find your way.

Employee Empowerment & Retention Through Sowing Carrots

At this time of year, you are just past the mid-point of your summer growing season, with eyes on the end of the season and the fall. Your focus is probably on maintenance – keeping the plants healthy and growing, harvesting the crops that are ready, and getting the crops to the customers. These are good focal points for any producer to have.

At the same time, you are also focused on helping/encouraging any employees to maintain a steady, constant pace and get the most value from their labours. With labour being one of the most significant production expenses in any operation, this is good business practice. Employees are a critical component in any operation (unless you like to work like a rented mule). Keeping your employees productive is challenging, especially since no two employees are the same. To put a twist on it, how many of you think about employee retention mid-way through the season? That topic is probably not even halfway to the forefront of your mind. You might even question if they are related. I'd suggest three things. First, employee productivity is pivotal to successful, profitable operations. Second, employee productivity and employee retention are intricately connected. Third, employee retention (and rehiring, recruiting, etc.) is like many important issues; we don't deal with them until after the fact or "later", which is too late.

So what do carrots have to do with any of those three things? Allow me to explain.



A number of years ago, I took part in a tremendous leadership course. Like all good courses (in my opinion), I came away not just with many tidbits of information and tools to use in different aspects of my life, but I had also taken a good, long look at myself from different angles; I saw ways to make some improvements and changes. One thing that was discussed was the importance of offering feedback: specific, direct feedback, coupled with suggestions for continued action. It could be used constructively, or to express appreciation or thanks. Following the course, with these things on my mind, my brother-in-law shared a few different books with me which highlighted the importance of recognition and introduced the concept of "creating a carrot culture" within any particular organization.

"Managing with Carrots" – Adrian Gostick & Chester Elton
"24-Carrot Manager" – Adrian Gostick & Chester Elton

Carrots = recognition and rewards (in a range of forms) and the authors postulate that organizations that freely sow carrots throughout (and encourage them to grow and reseed) have higher morale, greater productivity, better retention and greater creativity. As growers of carrots (and other things), who better than us to apply these sample principles.

Employee Productivity (Happy employees work harder and better)

Employees are critical to any operation. They do a lot of the work, are often the face of the operation and, if harnessed correctly, can contribute to taking your operation on to bigger and better things.

Things have changed since your father's and grandfather's generation (note - if you are the grandfather, you'd better tune in even more). People aren't content to work just for the sake of working. They want "more". More could be any number of things. Many workers need motivation more than direction. They want to know why, even more than how. They are motivated differently and have different expectations from their jobs. Most want to be valued not only for their blood, sweat and muscles, but also for their individual spark and creativity. They want to be involved. This is a pretty big shift, but an important one to understand.

By taking the time to recognize our employees (or even those who encircle us in our different "lives", a.k.a. roles), we strengthen our relationships and solidify their ties to what we are trying to accomplish and to our organization.

By recognizing the potential value of each individual (not just in our minds, but showing it externally to the individual), we suddenly have someone that is walking right there alongside of us. We get someone that is committed not just to putting in time, but that wants to make things better and more successful. People become creative, innovative and at that point, productivity has the potential to really explode.

Employee Retention (Happy employees will stick around and keep being productive)

I'm not all that old, but even I can see a serious shift in the attitude and work ethic of "young" workers (like it or not, they are the future workforce). It is harder to find good workers than ever before and even harder to keep them. Yet, we don't spend all that much time of this aspect. As I suggested before, we often don't think about retention until we see the back end of someone. Too late.

If we accept that recognition is the way to make people happier and more productive, it isn't a long leap to see that the same principle applies in retention. Productive employees feel valuable and valued employees will stick around. As humans, we tend to stay where we are happy. Applying significant effort to recognizing our employees will pay dividends towards our long-term success.

Sowing Carrots – Providing Recognition

So, how does one provide recognition and express appreciation for your employees? How do we reward not just good behaviour, but recognize and encourage great innovation and significant, meaningful contributions to the operation? How do you help employees feel valued or that they are a contributing part of your operation? The first important step for any of us is to realize that people aren't clones, but have different wants and needs and are motivated by different things. According to Gostick and Elton, you need to recognize that employees want more than just bread, but need carrots as well.

One of the more traditional ways to recognize, motivate or reward has been to provide monetary rewards or incentives, but one thing that the authors suggested was that money (or bread) is not the greatest motivator, at least not in the long term. Gostick and Elton say that *"Money doesn't buy love; it doesn't buy happiness; it doesn't buy commitment"*. And that is really what we are after, isn't it? Commitment.

Gostick and Elton outline a few of the things that employees are really looking for, or the carrots that need to be offered to employees. They say that employees "crave:

- Knowing what is expected of them
- Having the tools to do a good job
- Having the opportunity to do what they do best
- Receiving recognition or praise for good work"

These seem like pretty simple things, but ultimately, aren't these what any of us want? To clearly understand the goals and direction we before us; to have the right tools, so that we can actually do the job right; to be able to focus our energies and attention on what we excel at; to be recognized for doing something worthwhile, in a way that is meaningful to us.

The beautiful thing is that sowing and providing carrots doesn't have to be a huge undertaking or expensive. It can (and probably should) be made up of small, simple and definitely genuine things. Personalized, individual actions can really give long term value to both you and the people that work in your operation. In my travels across North America, visiting different operations, I've seen some interesting examples. Bucket washing "parties" accompanied by ice cream and water fights. Spontaneous snack delivery. It doesn't have to be crazy, just creative and appropriate to your specific group.

To give the last word to Gostick and Elton, *"In today's competitive crunch, nothing beats carrots. Stick with bread alone, and you might just end up toast!"*

Non-pest Pests – Wasps / Yellow jackets / Hawthorn Lace bugs

A number of insects that are considered nuisance or "minor" pests in certain situations or may become problematic of some crops

Crops Affected:

Wasps / Yellow jackets / Hornets (*Vespa* spp., *Dolichovespula* spp., *Vespa* spp.); – strawberries, raspberries & other fruit crops

Life Cycle:

- Not pests but are scavengers
- Queens build a nest in a range of sheltered areas, such as buildings, woodpiles, underground or unprotected areas like trees and shrubs
- Populations increase over the summer, peaking in fall
- Workers scavenge for insects or rotting fruit
- Mating occurs in the fall and fertilized queens overwinter

Symptoms:

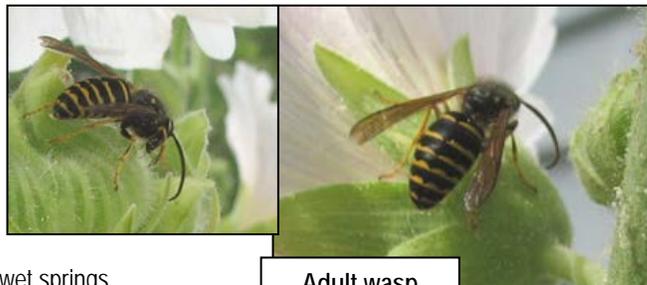
- Don't damage crops, but feed on damaged or over-ripe fruit
- May be present during harvest

Monitoring:

- Nests may be difficult to locate
- Large numbers of visible wasps may indicate the presence of a nest
- Warm, dry springs can produce larger wasp problems in August than cool, wet springs

Management:

- Regular sanitation can help keep populations lower; this would include prompt harvesting of all ripe berries and clean picking practices
- It has been suggested that the presence of another nest will deter settlement of an area, therefore false nests may be effective deterrents
- Careful destruction or removal of existing nests



Adult wasp

Hawthorn Lace bug (*Corythucha cydoniae*) – Saskatoon berry and other plants in the Rose family (apples, hawthorn, pear, cotoneaster, etc.); other species may affect Saskatoon, chokecherry, etc.

Life Cycle:

- Overwinter as adults (Two generations per season)
- Black eggs are laid in clusters on the underside of leaves in early spring
- Nymphs emerge and feed on the underside of the leaves after about 3 weeks
 - 5 instars; 1st generation of adults emerge in midsummer, 2nd in fall
- Feed by piercing leaves and sucking out plant juices

Symptoms:

- Stippled or mottled leaves with many lace bugs present
- Feed in large numbers
 - leaves may be stained with their excrement
- Adults are small bugs which appear to be covered in lace
- Nymphs are dark brown to black and covered in varying amounts of spines

Monitoring:

- Not required, but can be detected while scouting for other insect pests

Management:

- Not typically required, as do not typically cause economic damage
- May be controlled during chemical applications for other registered pests



Hawthorn lace bug adults



Hawthorn lace bug nymph



Evidence of lace bugs on leaf undersides – nymphs, adults, frass and stippling of leaves

Severe leaf stippling and discolouration

Photos by Robert Spencer



Lace bug injury on Saskatoon berry – yellowing / stippling



Aspen/Poplar Tree Leaf Spots / Splotches / Blights

Leaf & Shoot Blight of Aspen (*Venturia macularis*); Septoria Leaf Spot (*Mycosphaerella populicola*); Marssonina Leaf Spot of Aspen (*Marssonina populi*)

Crops Affected: various aspens and poplars, depending on pathogen species

Disease Cycle:

- Fungal pathogens
- Spores are generally produced in the leaf litter, or on twig lesions (depending on pathogen), spreading to infect new leaves
- Continuous wet weather in spring, and warm/moist conditions in summer, can result in the production of spores and rapid spread
 - Secondary disease development is more common in some diseases (e.g. *Marssonina*), regardless of conditions, although rate of spread is linked to presence of conditions

Symptoms

Venturia

- Angular black spots form on host foliage, with spots growing and merging to cover the entire leaf/shoot, resulting in wilting and necrosis of the entire structure
 - Affected parts continue to elongate, producing a drooping “shepherd’s crook” symptom
- Can kill a significant number of terminal shoots, in severe situations

Mycosphaerella

- Initially starts as small, circular to angular, white, grayish, tan, brown, or purplish spots with a dark border
 - Spots may coalesce to form blotches
 - Dark specks (pycnidia – fruiting structures) are scattered in older lesions

Marssonina

- Small, brownish spots appear on infected leaves from as early as the end of leaf expansion, through July and August
 - Spots enlarge, turn brownish black, and often have a yellow margin and a white center
 - Spots may coalesce to form vein-limited, necrotic blotches
- Infected leaves may fall prematurely, particularly when infection occurs at/on/near the leaf petiole
- Stands may appear thin, due to loss of leaves

Conditions Favouring Development:

- Generally favoured by cool, wet weather in spring
- Warm, moist conditions in summer can result in further spread

Management:

- Remove and destroy leaves that drop, and/or twig/branches or other infected material, to reduce inoculum levels and reduce spread
- Plant resistant species or clones, if available
- Ensure that there is adequate spacing between plants, to improve air circulation and reduce humidity
- Fungicides (applied in spring) are largely impractical in the vast majority of situations



Venturia leaf blight on aspen
Photo by: tidcf.nrcan.gc.ca



Septoria leaf spot on poplar
Photo by: tidcf.nrcan.gc.ca



Marssonina blight on aspen leaves
Photo by: William Jacobi, Colorado State University, Bugwood.org