Subscription $30 per year • December 2014

Bleuets NB Blueberries

Field Notes

Bleuets NB Blueberries · 32 Route 11, Lower Newcastle, NB E1V 7C9
Tel. (506) 622-2603 · Fax (506) 622-8920 · **bnbb@nb.aibn.com** · www.nbwildblue.ca

Upcoming Events

January

AANB's 9th AGM
January 22 & 23, 2015
Fredericton Crowne Plaza
www.fermeNBfarm.ca

Canadian Beekeeping Convention 2015
January 28-30
Delta Beauséjour Hotel, Moncton, NB
(see page 11)

February

PEI Dept. of Agriculture and Forestry Post Harvest Management of Fruits & Vegetables
February 20-21, 2015
Farm Centre, Charlottetown, PEI

March

CHC AGM
March 10-12, 2015
The Fairmont Le Chateau Frontenac
Québec, Québec
www.hortcouncil.ca

WBPANS Winter Information Meeting
March 14, 2015
Best Western, Truro, NS
www.nswildblueberries.com

Quebec Blueberry Day
March 18, 2015 at 8:15am
Dolbeau-Mistassini Concert Hall
Province of Quebec
www.spbq.ca

BNBB Annual District Meetings
March 17: Moncton
March 24: St-George
March 31: Tracadie

April

Bleuets NB Blueberries AGM
April 9-11, 2015
Carrefour de la Mer
Caraquet, NB

PEIWBGA Blueberry Information Day & AGM
Thursday April 9, 2015
peiwildblueberries.com/news-events/

Diversification into blueberries *equals success for Schenkels family*

By Trudy Kelly Forsythe

For the past eight years, John Schenkels has been busy 60 kilometres away from his family's 350-acre dairy farm in Whitney, NB, transforming 400 acres of crown land south of the Tabusintac River into thriving blueberry fields. It has meant clearing trees, applying weed controls and fertilizing the land to stimulate the blueberry plants to grow and produce wild blueberries.

The hard work is paying off with yields increasing annually. In fact, John says the yields went up a bit faster than originally anticipated when he and his wife Tamara started this initiative.

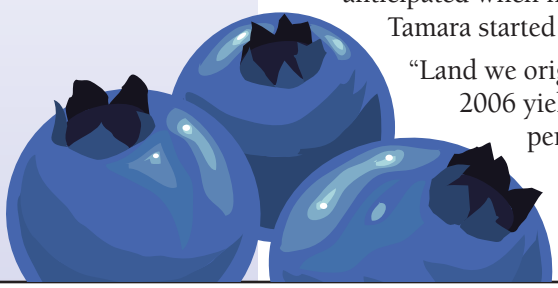
"Land we originally cleared in 2006 yielded 5,000 pounds per acre this year, which is double what they were two years ago," he says. "We're really excited about the yields and how fast they are coming on. When we started, our expectations were half what we got this year."

John credits that success in yields to investments in research.

"There's a lot to learn about how a plant grows and yields, but it's not unlike dairy," John says. "We find new and better ways to do things that are more in synch with the plant or cow, and this lets them yield more."

Those new and better ways include a lot of little steps like ensuring sprays and bees are on the fields at the proper time.

"Everything has a place," John says. "We're doing research on fertilization and weed controls and as all the information comes forward, we try to incorporate that into our production practices.



"For instance, one thing we do is weed control late in the fall that's been successful and does less damage to the blueberry crop than if we apply it at other times of year. That's new research; all conceived, researched and applied since we started."

Family Business

John is a second generation farmer, following in the footsteps of his parents who immigrated to Canada from Holland in 1959 and began dairy farming. He took the family farm over in 1993 after completing a four-year degree in science and plant science at the Nova Scotia Agricultural College.

His 80-year-old father, Joseph, is still involved with the farm a bit, but John and Tamara run the farm together. They are also bringing up the third generation of Schenkels farmers with their daughters Jordan, 24, Gabrielle, 15, and Payton, 11, and son Hans, 13. "The three youngest picked blueberries this year," John says.

Diversification

The decision to enter the blueberry business came about because dairy quotas were getting more expensive. The Schenkels started looking for alternatives to diversify the farm and learned crown land leases were available for wild blueberry cultivation.

"Being in dairy, we are used to capital intensive projects and we are used to being patient," John says. "We saw opportunities there because we knew that over a period of time we'd be able to reduce some of the risk. It took a lot of planning."

Eight years into it, clearing an average of 60 to 70 acres each year, the Schenkels have 300 acres in production, and plan to develop another 100 in the next year or two. Of the 300 in production, John says the 5,000 pounds per acre came from about 120 of those acres. There are some still under development that yield less, but the Schenkels anticipate they will eventually produce the same yields.

John and Tamara employ two full-time employees on their dairy farm and three seasonal employees who work the blueberry crops and at the dairy farm from April to December.

"Being diversified, we are able to spread our seasons on both sides so we are able to offer good seasonal employment that keeps them coming back," John says, explaining one way they've extended the season has been to change their cropping on grass from two to three cuts to straddle the blueberry harvest in August. "We produce 300 to 350 acres of crops for the cows."

Award Winning Farm

The farm's practices for both the blueberry fields and dairy farm crops are what saw the New Brunswick Soil and Crop Improvement Association name it Farm of the Year in 2010. In selecting the annual recipient, the association looks at a variety of criteria including farm practices, such as tillage, crop production and environmental sustainability. Yields are important, as is overall participation in industry.

"Our focus is to stay on the leading edge of innovation, to not necessarily be first, but to have good crop production practices in place that are good for the environment as well as yields," John says, explaining he has been involved in several boards and in industry over the years to keep up to speed.

That's important in agriculture's changing landscape. "The way we go about producing [wild blueberries] has changed dramatically," John says, explaining it has gone from low-input, low-intensive management to higher input and a high degree of management. "The yields we are getting, we didn't dream of having eight years ago. They are phenomenal yields. It's exciting to be innovative and to find new ways to get a quality product out to consumers."

The Schenkels family

Schenkels' blueberries potentially reach consumers all over the world as they sell all of their berries to Oxford Frozen Foods for processing in Nova Scotia. They have no plans to expand into the fresh market or develop new processing markets on their own at this point.

John does admit, however, that as yields increase, finding new markets could become a challenge. Maintaining the quality of the berries so industry can promote their benefits and differentiate them from other crops is another challenge as is keeping farmers viable and profitable. "We want to keep a good lineup of independent farmers in marketplace," he says.

Pollination is another challenge as well, but John says they work closely with beekeepers to ensure their crops are optimally pollinated. "We're learning about the bee industry and how we fit in and we work with bee owners to come up with plans to get the job done," John says. "We're already looking for bees for next year's crop."

Challenge is one of the aspects of farming John likes most including the challenge to produce a product that everyone likes and has good health benefits. And while there may be lots of challenges to increase yields, John says it's an exciting time to be in the blueberry business.

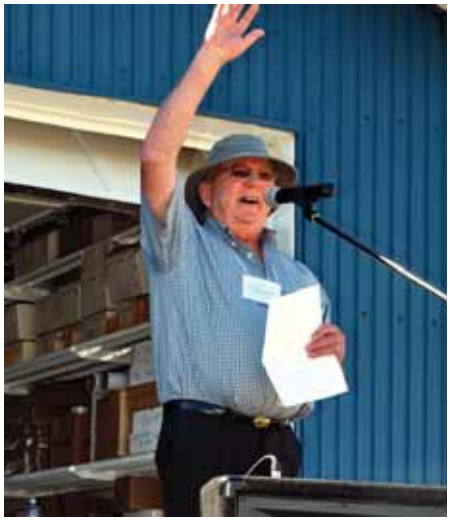
MESSAGE FROM THE CHAIR Murray Tweedie

Another year and yet another record crop for New Brunswick wild blueberry growers! Congratulations are in order to all those associated with this vibrant industry of ours – to the growers, to the processors, to the researchers, to the DAAF staff, to WBANA and to each and every person and group working behind the scenes toward the sharing of information and moving our industry forward – and, yes, this includes our own BNBB!

The weather, for the most part, provided the "perfect storm" toward the successes of this year's wild blueberry crop – abundant snow cover last winter, good pollinating weather this spring, and adequate rainfall coupled with good daytime temperatures and warm nights this summer. The season was, however, not without its challenges. There were the usual insect, weed and disease pressures to be dealt with throughout the season and then to top it off, at harvest time, a bottleneck in the processing plants due to the record volume of blueberries being shipped in.

This situation resulted in huge co-ordination and management issues for the processors, anxiety and frustration for the growers coupled with an extended harvest period for both.

The situation that presented itself this harvest highlights one very important fact – the growers and the processors can indeed work together and are very much dependent on one another for the long-term success of our industry. We must continue to work together toward its sustainability and growth. We must demonstrate to the world that we are an industry that is cooperative and unified, not one that is disjointed and in turmoil. This year has demonstrated that we are capable of producing a much higher volume of fruit per unit area than in the past. We must now focus on growing, harvesting and delivery to the processor, the highest quality fruit possible in exchange for a fair and equitable return across the board. To achieve this will require a genuine spirit of trust, transparency, knowledge-sharing, and honest hard work on



the part of all concerned. This may seem like a long reach, but I truly believe it is an attainable goal and in the best interests of all concerned – from the grower, to the processor, to the consumer and to everyone in between.

On behalf of the Board of Directors of BNBB, I wish to extend to everyone a very happy, peaceful and safe holiday season and the hope for a healthy and prosperous new year.

CROP UPDATE

Submitted by Michel Melanson

The vegetative fields were healthy going into the fall of 2013 and with adequate snow cover, winter injury was minimal. Plant development was two weeks later than in previous years. Wet conditions during bud development resulted in *Monilinia* blight infection periods; however, growers followed the recommended practices for control and minimal symptoms were observed. *Botrytis* blight damage was also negligible. In the Southern region, early pollination weather was poor, but improved as the season progressed. The weather conditions were good in the Northeast. It is estimated that more than 30,000 honey bee colonies, 4,000 bumble bee quads and 2,000 gallons of alfalfa leafcutter bees were used for pollination. Growers noted that the native bee population activity was good. A frost occurred during bloom, but damage to flowers was not noticeable. Rainfall events occurred regularly throughout the growing season, providing adequate moisture. A high number of blueberry fruit flies were captured using yellow sticky traps in many regions and control measures were required. In collaboration with Bleuets NB Blueberries, the Department monitored for the presence of the spotted wing drosophila (SWD). The first SWD was reported on August 15, in a non-blueberry field. The first SWD captured in a blueberry field was on August 22, three weeks later than in previous years. The fruit quality was very good and production is estimated at 60 M lbs.

Welcome to NBDAAF Newcomers Venessa and Jessie!

Jessie Chiasson

Dear readers, as a new member of the New Brunswick Department of Agriculture, Aquaculture and Fisheries (NBDAAF), I would like to introduce myself. My name is Jesse Chiasson, and I am from Petit-Rocher in northeastern New Brunswick. I have a bachelor's degree with honours in biology from the Université de Moncton. My first job in agriculture was at the Hervé J. Michaud Experimental Farm in Bouctouche, in 2009. I worked there for three years, under Dr. Jean-Pierre Privé's supervision.

While I was at the Bouctouche research station, I was fortunate enough to be involved in a number of different research projects. The studies dealt with cultivation of various fruits and vegetables under polytunnels (high tunnels), the use of Extenday® reflective material and rain shelters, and the absorption and translocation of mineral oil in potato crops.

Unfortunately, with the budget cuts by the federal government in 2012, the Hervé J. Michaud Experimental Farm was closed. I was then hired by Cavendish Farms on Prince Edward Island, where I worked for two years as a research associate. During my time at Cavendish, I did research on potato production (processing, seed and table potatoes). As part of my position I also worked on various aspects of production, including tests on potato varieties, pesticides, fertility, and crop rotation. However, my main responsibility was research on fertilization. I developed a particular interest for crop rotation.

Jessie Chiasson

Venessa Allain

Finally, in July 2014, I began working for NBDAAF. My office is located in Tracadie-Sheila. My main duties are in the areas of blueberry cultivation, apiculture, and potato crops. Because of my background, I obviously focus on research. I have also developed expertise in honey suckle crops. I administer various grants and financial contributions in the "Growing Forward 2' programs. Although my primary responsibilities are the ones mentioned above, I sometimes work in other areas and programs as well. I am looking forward to working with you in order to help solve your problems and learn more about your concerns.

Venessa Allain

Since July 2014, I have been part of the team working at the Department of Agriculture, Aquaculture, and Fisheries in Tracadie, where I am a Crop Development Agent. My role in the Department is to promote and help develop agriculture in northeastern New Brunswick. In particular, I focus on market gardening, berry production, greenhouse production, and any other crops which might need support to flourish. I am very interested in developing regional and community agriculture and promoting local and homegrown products.

In 2009 I graduated with a Bachelor of Science in Agroecology from the University of British Columbia. In conjunction with my studies, I was able to apply my theoretical knowledge to different farms in the Fraser Valley in British Columbia. Afterwards, I returned to my home territory in order to start an agricultural business in 2011.

I'm very much looking forward to working with the growers to help develop our agricultural sector.

MLA Breakfast

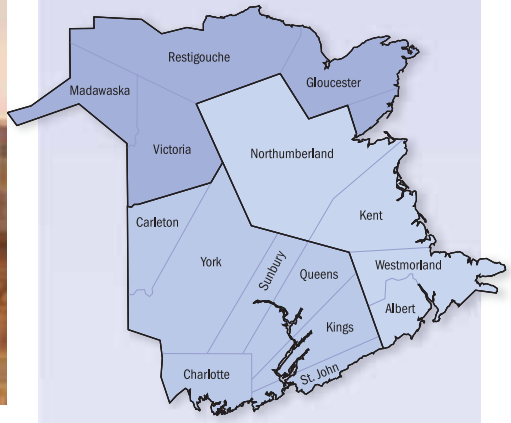
On Dec 10 2014, BNBB Board members and the N.B. Maple Syrup Association hosted our annual MLA breakfast at the legislature's cafeteria in Fredericton. Considering our sector is booming, the event provides a great opportunity to report to all departments of the provincial government on the economic importance of the wild blueberry industry in NB as well as to discuss future outlook. In fact, with the growth taking place in the Blueberry sector, it is vital that they are kept informed and the breakfast, in their work environment, provides an ideal venue for that exchange. BNBB thanks everyone who works hard to make this event a success. Special thanks to Dianne Mackay, responsible for catering the event!

Have you visited the website recently?

The BNBB website has a fresh, new look and expanded content for growers. We invite you to use the Log In section to set up an account, so that you can access news, updates, grower information and links to other sites of interest to our industry. BNBB reviews the website regularly to make improvements and add information. If you have ideas or suggestions for the website, please call the BNBB office at (506) 459-2583 or send an email to bnbb@nb.aibn.com.

www.nbwildblue.ca

Board of Directors



District 1

Counties: Charlotte, Saint John, Kings, Queens, Sunbury, York and Carleton

John Ness
Russell Weir
Ed Goguen

District 2

Counties: Westermorland, Albert, Kent and Northumberland excluding the parish of Alnwick

Murray Tweedie
➤ Chair
Kathy Trueman Del Villar
➤ WBANA Board Representative
Brett Reidpath

District 3

Counties: Gloucester, Restigouche, Madawaska and Victoria and the parish of Alnwick in Northumberland county

Arsène Roussel
➤ Vice Chair
Norbert Brideau
Vernon Losier

Office Hours

The hours of operation for the office are: Monday, Wednesday, and Thursday from 9:00 to 5:00.

Bleuets NB Blueberries

Controlling Mummy Berry

(Monilinia Blight)

Submitted by Kelvin Lynch, IPM Solutions

As blueberry growers increase yields by applying greater inputs their tolerance for risk declines. In addition, as yields increase the return improves on an input such as a pest control application. This is because the cost of spraying is the same for low yielding and high yielding fields but the return on a high yielding field is greater. Losses to mummy berry can be severe and the disease is present in all blueberry fields at some level. Since the disease over winters in the field pruning by burning significantly reduces the disease risk, but the percentage of our production base that is burned each year is declining and we are not likely to see a reversal in that trend. As we move away from burning, our dependence on fungicides for disease control increases. The period of crop susceptibility to mummy berry infection is about 2.5 weeks so getting good control with just one, or even two sprays is asking a lot from a fungicide. The timing of fungicide applications for mummy berry control is therefore critical and the most common error is applying too late. If you can already see blight or blossoms opening in the field then it is too late to start your spray program. Apply the first spray when the flower bud scales have opened on at least 50 percent of the fruit buds, apply the second spray 7 to 10 days later (Fig. A). Fungicides are typically applied prior to wet periods to prevent infection, but for this disease it is possible to apply after a period of rain and get good control as long as it is done within 48 to 76 hours of when

Figure A

the rain started. If a hard frost occurs during the susceptible period the buds become more prone to infection and protection is therefore even more important.

The fungicides used for mummy berry control have been dominated by one particular chemical, propiconazole. Growers are familiar with this fungicide by the trade names; Jade, Tilt, Topas and Mission. All these products perform similarly and you should shop by price and service. There are however differences in formulation and therefore rates. Jade, Topas and Tilt have 250 grams active per litre whereas Mission has 418 grams of active. Tilt is actually an old formulation used on other crops but in 2014 blueberries were added to the list of registered crops. Since propiconazole fungicide has been used for so many years there are concerns about the possible development of resistance. To date however, this does not appear to have occurred to any significant degree.

Figure B

Propiconazole chemicals are not the only fungicides registered for mummy berry management, Funginex is an older chemical and also a proven performer for mummy berry control. There are also newer fungicides such as Quash, Fontelis and Proline. Many growers are familiar with Proline since they have been using it for leaf rust control in the sprout year. In a limited number of trials conducted so far Proline and Fontelis have shown efficacy at least equal to that of propiconazole. The label instructions for the use of Proline on wild blueberry for control of mummy berry are not accurate and the product should be used as discussed in this article.

Many of these fungicides are toxic to fish, and growers should be careful not to drift spray onto wetlands that may drain into brooks or rivers. Before using any pesticide in the crop year first check with your buyer to make sure it is acceptable with them.

There are several management tools available for determining mummy berry disease risk including using field specific weather monitoring, mummy berry cup maturation, recording blight incidence in previous crops and assessing the number of actual mummy berries produced in the previous crop. To date however, there hasn't been much grower use of these tools.

To time your first fungicide application you should be checking bud development in cropping fields in late April and early May. When doing this watch for other early season pests such as the strawberry root worm and blueberry leaftier. The leaftier is a small, dusty-gold moth that can be seen in blueberry fields during early July. It lays its eggs in the leaf litter and they hatch the following spring in early May. Larvae climb the stems and feed on the developing buds (Fig. B). This is not a new pest in NB but it is increasing in at least one production region.

Bleuets NB Blueberries

WBANA USA UPDATE
WBANA Health Research Summit

Submitted by Susan Davis, MS RD, Nutrition Advisor WBANA

Since 1998, leading researchers active in the fields of neuroscience, aging, heart disease, cancer, eye health and other health-related areas meet annually in Bar Harbor, Maine, for Wild Blueberry Health Research Summit. Known collectively as "The Bar Harbor Group," the scientists meet to share their research findings and to explore opportunities for future collaboration.

This year marked the 17th Annual Wild Blueberry Health Research Summit (September 17-20, 2014) where eighteen leading researchers from the US, Canada, England, Japan and Germany convened to discuss blueberry and human health research findings. Many of the attendees have been with the Summit for more that 15 years and have become good friends and research collaborators.

The Summit has been instrumental in generating great interest among the scientific community to the potential health benefits of wild and cultivated blueberries. That interest has resulted in an unprecedented amount of published research, over 140 studies this year alone. Summit researchers also pioneered methodologies that helped facilitate the science.

A unique aspect of the Summit is that the researchers are not only given an opportunity to share their work with each in a non competitive environment, they enjoy convivial evenings together in various Bar Harbor settings. From Lobster bakes, to boat trips to lovely seaside dinners the researchers share and laugh together. WBANA is well represented with several industry leaders, the Executive Director of Canada, The Wild Blueberry Commission of Maine, the US marketing team and WBANA nutrition advisor.

The special relationships have resulted in more research and marketing opportunities.

The outcome of the health research is obvious for the Wild Blueberry industry. There is greater demand for blueberries and wild blueberries. WBANA has been a pioneer in marketing the health benefits of a commodity and helped make blueberries the health icon they are today. The new US marketing group Ethos, is adding another dimension to the plan by using social media to reach new audiences and further differentiate wild blueberries from their cultivated cousins. With other PR agencies in Europe, Canada and Japan working for WBANA and a new WBANA website, the message about the health benefits and the uniqueness of wild blueberries is making an impact.

Be sure to visit **wildblueberries.com** to see the new look of the website and the comprehensive research library of all the published health research on blueberries and bilberries. Planning for the 18th Wild Blueberry Health Research Summit next year is well underway.

Multi-level pollination approach works *for Acadian Peninsula producer*

By Allison Finnamore

With a goal of a consistent 5,000 pound per acre harvest from his fields, Neguac wild blueberry producer Bernard Savoie is banking on bees.

Savoie has 550 acres of wild blueberries, with another 100 establishing. He puts a variety of bee species to work to help reach his goal; in some fields, he'll put in one or two bee species to work, while others, he may use three species, whether it be honey bee, bumble bee or leaf cutter bee hives.

He tailors the bee placement based on field location and conditions. Leaf cutter bees, for example, perform best in warm weather, so Savoie avoids putting them near shoreline fields so they don't catch an ocean breeze.

Among the findings of the Canadian Pollination Initiative, a national wild blueberry research group which recently wrapped up five years of study focused on pollination is that diversity of pollinators is beneficial to the blueberry crop. Particular pollinators, like Andrenid, more commonly known as mining bees, bees and bumble bees, which buzz pollinate flowers, contribute to high pollen transfer.

But it's not that simple, the scientists found.

Mining and bumble bees forage in blueberry plants in close proximity to each other, which will increase self-fertilization of the plants, and, the scientists found, reduce fruit set.

Adding longer flight pollinators could help the situation, they said.

According to Agriculture and Agri-Food Canada, size of the bee needs to be taking into consideration when deciding which species to place in a field, since flight distance varies by species. Large bees like bumble bees can forage at distances of 1.5 kilometres or more from the nest. Medium-sized bees such as mining bees or leafcutter bees can fly 350 to 450 metres from the nest. Small bees, such as sweat bees and small carpenter bees generally fly no more than 200 metres from their nest.

AAFC states that it's important to remember the shorter the distance a bee has to fly to find flowers, the more efficiently it can forage and provide for more offspring.

"In other words, no matter what the size of the bee, bee populations thrive best when abundant forage resources are available close to their nest," the department states.

The Canadian Pollination Initiative found that even if bees don't actively extract pollen, they can still play a role in pollination of wild blueberry plants.

"A pollinator that cannot extract pollen from a flower may still be able to pick up pollen left over from another pollinator and move it to distant, unrelated plants. For this reason, there is great interest in how pollinator diversity (and combinations of different bee species) can influence how pollen moves between flowers and between plants, and in doing so influence crop yield," the scientists wrote in their final report.

The research team also found that due to the very nature of what wild blueberries are, there are pollination and fruit yield challenges. In domesticated crops, breeding practices factor out genetics which may impact yield, but naturally occurring wild crops like blueberries don't have that opportunity. It all comes down to management practices – including pollinators – when trying to increase yields.

One of the key findings of the Canadian Pollination Initiative was that the addition of pollinators creates what they called an insurance policy for the farmers, helping ensure fruit set.

Savoie agrees, adding he also considers the managed bees additional assurance that his crop is producing at peak. Timing, he adds, is critical. Getting the bees to the wild blueberry flowers at the beginning of blossom is essential for increased yields since the flower is more receptive.

"The more bees you have in that time frame, the more pollination is going on, there's more chance of producing a blueberry and a bigger blueberry," he says.

Savoie explains that with, for example, the addition of one hive in an acre of blueberries, 50 per cent of production from the hive are what he calls nice blueberries, while 25 per cent may be small berries and the final quarter may be fails. A second hive would produce the same half an acre of nice berries, with 25 per cent small berries and 25

per cent barely surviving. With both hives working together, 25 per cent of small berries become large berries and the 25 per cent fails become small, viable berries. A third hive into the field increases the opportunity for larger berries.

It's an investment in the crop and in success, Savoie says.

"The way we see it, at high yield, it's easier to get a bigger blueberry than it is to create a new one."

Each type of bee that he brings into the fields has their own characteristics, both positive and negative. Honey bees can feed off of wild plants while waiting for blueberry flowers, but bumble bees are more readily available for rent throughout the province. Put honey bee hives in the field at the wrong time, though, before blueberry flower and they'll move to another flower and feast on its pollen until that flower time has passed, meaning they could miss blueberry flowering all together. Leaf cutter bees, Savoie explains, are temperamental to temperature changes and aren't as productive in cooler temperatures.

Savoie takes a multi-layer approach with a variety of bee species, avoiding putting all of his blueberries into one hive.

As for the mix of hives per field, Savoie decides on an investment price – an actual dollar figure per acre – then based on the rental price per hive and field location, decides where to put which species. Advance management decisions are based on the worst recent season.

While studies completed by the Canadian Pollination Initiative found no strong evidence that one particular bee species or combination of species influenced fruit set, the group found contradictions, such as pollinators in different studies highlight the complex interactions of resources, pests and genetics with the pollinator regime. Another study found native pollinator species are doing an adequate job.

Overall, the researchers suggest that levels of pollination (added and natural pollinators) are sufficient and management regimes that reduce populations of native pollinators from current levels could result in a negative effect on yield.

According to AAFC, there are approximately 706,000 honey bee colonies in the country with an estimated total value of $2 billion. The number of colonies has increased over the last five years from about 570,000 in 2008 to its current level, as of 2012.

Overall, there are about 970 different species of bees native to Canada, most of which don't live in colonies.

Photo Credit: Trudy Kelly Forsythe

Photo Credit: Trudy Kelly Forsythe

Photo Credit: Allison Finnamore

http://www.uoguelph.ca/canpolin/New/Blueberry%20booklet%20FINAL%20English%20web.pdf

Disease Management in the Fruit Year
Keeping Your Blueberries Healthy from the Start

This article has been prepared by a Syngenta representative to give growers general information on leaf diseases.

By: Jim Anderson, Agronomic Service Representative, Syngenta Canada and Leigh Jenkins, Blueberry Farmer

You've worked hard to get your blueberry crop strong and healthy throughout its sprout year. So now what? How do you help enable your blueberry plants to retain more flowers and produce an abundant crop of fruit so you can reap the benefits of your previous year's successes? By protecting your investment.

Protection, protection, protection!

When it comes to safeguarding your blueberry plants from disease, proper protection can't be stressed enough.

The first and most important management practice is to get ahead of disease before it takes hold of your crop. A proactively applied fungicide applied early in the spring is necessary to protect the plants before yield-robbing diseases take hold.

There are three main diseases of concern at this time of the growing season – *Monilinia* blight (or "mummy berry"), *Botrytis* blight and *Septoria* leaf spot. While *Septoria* is a leaf and stem disease that occurs later in season, *Monilinia* and *Botrytis* are mainly bud and flower diseases that can impact yield in the fruit year.

Monilinia blight is one of the most significant and costly diseases to any blueberry grower in the fruit year. This disease can infect the leaves, blossoms and fruit of the blueberry plant. *Monilinia* blight likes cool, wet conditions. An important thing to point out is that it can be difficult to distinguish between a *Monilinia* infection and frost damage until later in the season, so it's important to scout often if you detect symptoms. Once the fungus infects flowers, the fruit it produces is mummified and will eventually fall to the ground and produce spores the following season to continue the disease cycle. While the infection cannot be reversed with a fungicide application after the disease is visible, an application at this time can still be beneficial.

Botrytis blight (also known as grey mould) is another scourge. Plants can become infected with *Botrytis* during mid to late bloom, particularly after a wet period. The disease occurs during bloom and can cause the harvested fruit to rot, resulting in yield loss, but can also infect leaves and stems of the plant. Weak or injured tissue is particularly susceptible to *Botrytis*, and mature or frost-damaged blossoms can be most affected. Spores can also spread to healthy berries and cause rotting post-harvest.

Your best defense against yield-robbing disease is the application of a fungicide before infection occurs. This will greatly reduce the onset of disease. A second fungicide application with a different mode of action is usually warranted 10 to 14 days after the first, particularly in fields where you anticipate higher yield or if bad weather occurs.

Applying a fungicide to protect against disease during this critical time of early growth can help enable plants to produce multiple fruit buds and develop fruit with a thicker skin, which reduces shatter loss and berry drop.

Mummyberry infection
Photo Credit: New Brunswick Department of Agriculture, Aquaculture and Fisheries

Growers are always evaluating the cost and benefits of applying fungicides to their crops. If you have already made the investment of time and effort into your blueberries, protecting this investment makes sense. Early-season fungicide applications can mean a difference of a crop producing 2,000 or 4,000 lbs. per acre. That's a lot of potential yield for your hard work.

The blueberry business is ripe for growth. A proactive approach to your disease management practices will help ensure a healthy and bountiful crop, now and for the future.

Bleuets NB Blueberries

WBANA UPDATE Canada

A look back at 2014:

- Accompanied Minister Ritz to Korea, Trade mission. Canadian Embassy Seoul Korea.
- Japan for the FABEX Show in the Spring. Meetings with Jam Association President, other Japanese companies.
- Trade Mission to China in June with Minister Ritz, cooking demonstrations in 3 major cities, Beijing, Guangxou and Shanghai.
- Producer Field days: WBANA had a booth set up at the New Brunswick field day in St. George, in Debert, NS, and in Stewarton, PEI in July. WBANA also participated in the field day in Maine.
- Health Ingredient Asia Trade Show in October, Health Symposium at the Canadian Embassy in Tokyo, Health presentation at HI Trade Show by Dr. Tsuda.

During Harvest:

- Journalists from China visited Nova Scotia, PEI, Quebec.
- German Journalists Group, visited Nova Scotia, New Brunswick and Quebec.
- WBANA Symposium in Quebec City. With the assistance of the grower association in Quebec, SPBQ, WBANA held a successful Symposium in Quebec City. Excellent presentations on a range of topics, Health Research, production and Consumption of blueberries, what the buyer demands, how each market is different and how we approach them, production trials with Wild Brew group.
- Market access meetings in Ottawa. Participated in meetings and was one of three organizations (Canada Pork and Canada Beef) selected to be on a panel on doing business in China.
- Attended WBPANS Annual meeting in Truro, made a presentation on new North American approach to the marketplace, new logo, web site, POS materials, etc.
- Health Ingredient Europe: Very important Trade Show for the Wild Blueberry Industry, meeting potential end users of Wild Blueberries, product development people, R&D, decision makers.
- WBANA also participated in five major Trade Shows in the US, Canada's largest market for Wild Blueberries.

Wild Blueberries

2015 Canadian Beekeeping Convention to be Hosted by NBBA

The New Brunswick Beekeepers Association is pleased to be the host organization of the 2015 Canadian Beekeeping Convention, Research Symposium, IPM Workshop and Tradeshow, which will take place at the Delta Beauséjour Hotel in Moncton, NB, January 28-31.

This convention will tie together the annual meetings of the Canadian Honey Council (CHC) and the Canadian Association of Professional Apiculturists (CAPA).

Beekeepers and researchers of all skill levels from across the country are expected to attend, and some events will also be open to the public.

The full Convention schedule as well as online registration will be available soon!

For more information, please contact Ann Vautour (evangelinemiel@hotmail.com) or Guy Gautreau (gautreau.guy@gmail.com).

BNBB will have a booth during the Beekeeping Convention and is preparing a list of blueberry growers from NB who are interested in doing business with beekeepers across Canada. If you would like your contact information to be on this list, please contact the office of BNBB.

BNBB delivers the Advance Payments Program (APP) on behalf of Agriculture and Agri-Food Canada (AAFC)

- The objective of the APP is to give producers easier access to credit through cash advance
- Producers can only apply if they are part of a Business Risk Management Program such as AgriStability

You can get general information on Agristability by consulting this link:

www.agr.gc.ca/eng/?id=1291990433266

AgriStability is delivered in Manitoba, New Brunswick, Nova Scotia, Newfoundland and Labrador and Yukon by the federal government.

Here is the contact information for producers wishing to enroll or have more information:

Mail:

AgriStability Administration
P.O. Box 3200 Station Main
Winnipeg MB R3C 5R7
Toll Free Number: 1-866-367-8506
Fax: 1-877-949-4885
TDD/TTY: 613-773-2600

How do we determine a producer's maximum eligible advance using AgriStability:

Calculating Maximum Eligible Advance Using AgriStability

- In order to improve access by producers to APP advances and simplify the calculation for Administrators, the APP lending rules changed in January 2014 to allow advances of up to 100% of the producer's AgriStability reference margin when using AgriStability as security.
- pre-production advances secured using AgriStability will be the lesser of:
  - The APP advance limit of $400,000; OR
  - 50% of the forecasted production unit multiplied by APP advance rate; OR
  - The AgriStability coverage.
- A worksheet will be provided to administrators which can be attached to the producer application to maintain official records.
- The AgriStability coverage calculations are:

For Producers with a positive reference margin:

THE GREATER OF 100% OF THE PRODUCER'S REFERENCE MARGIN OR THE FOLLOWING CALCULATION:

A = Reference Margin

B = Average of the Allowable Expenses of the same three years used to determine the Reference Margin

Maximum Eligible Advance based on AgriStability = (A x 49%) + (B x 70%)

For Producers with a negative Reference Margin:

A = Average of the Allowable Income
(same 3 years used to determine the Reference Margin)

Maximum Eligible Advance based on AgriStability = A x 70%

For more specific information on the APP, please visit AAFC following link:

www.agr.gc.ca/eng/?id=1290176119212

To apply, please contact BNBB:

Monique Mills
Executive Director
Bleuets N.B. Blueberries
T 506 622-2603
bnbb@nb.aibn.com

BNBB extends
best wishes to everyone
for a very Merry Christmas
and a happy, prosperous
New Year!

Bleuets NB Blueberries