November/December 2019 Volume 20 Issue 6

Prince Edward Island POTATO NEWS



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- **Passed Seed Acres**
- Water Act Consultations
- 2019 AGM







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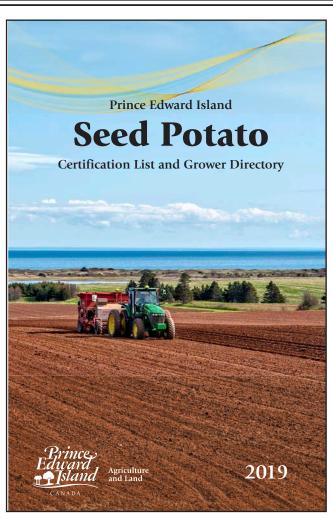
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Prince Edward Island

POTATO NEWS

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Morgan McNeilJunior Agronomist
Jacqui ScamanMarket Info. Officer

Tel: 902-892-6551 Fax: 902-566-4914 Email: potato@peipotato.org Website: www.peipotato.org

Fox Island Elite Seed Farm

Mark Pridham	.Farm	Manager
Eleanor Matthews	Lab	Manager

Please return undelivered copies to: PEI Potato Board, 90 Hillstrom Avenue, Charlottetown, PEI, C1E 2C6

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Cover: Potatoes are an integral part of any holiday meal from traditional turkey dinners to new vegetarian and vegan options. While potatoes are a staple in the food pantry year round, sales definitely increase during Thanksgiving, Christmas and Easter holiday seasons.

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Chairman's Comments

by Jason Hayden, PEI Potato Board Chairman



The following comments were the Chairman's report provided at the PEI Potato Board Annual General Meeting on November 20, 2019.

Serving this past year as Chair of the PEI Potato Board has been a real honour for me. It's been a year of learning. Thankfully, the Board is staffed with great people who make my role run smoothly. This year has again had its weather challenges. The Island dealt with a late wet spring, varying degrees of drought through the summer, early frost, a tropical storm, and fall rains. Fortunately, Island growers haven't had the cold temperatures and freeze up during harvest that plagued us in 2018 and has affected potato harvest in western Canada and the USA this year. Most reports indicate the quality of PEI potatoes is very high this season. Demand for table and seed potatoes, and potato products has been reasonably strong. **Processors across** North America will also be seeking additional potatoes that will meet their specifications to help address the weatherrelated shortages. The Board has and will play an important role in helping us deal with ever increasing weather challenges and helping to capitalize on the opportunities.

Over the past year, the Board has worked on many issues to help with the long term viability of our industry and our farms. Efforts have been underway for several years to attain a higher unit price under our crop insurance program that would better reflect actual market prices and allow growers to purchase insurance that would go further to cover some of our cost of production in the event of a loss. We received support from the provincial government for this higher unit price in 2019 and it was welcomed news. We continue to seek much needed major improvements to Agri-Stability.

Also after many years of effort, we have seen increased efforts in research and extension at all levels in recent years. This is crucial in increasing the resilience and competitiveness of our farms. Several new research positions have been staffed at Agriculture & Agri-Food Canada in the past couple of years, and the Province also hired an entomologist to help us better understand the life cycle of a major pest, wireworm, so as to develop strategies to manage it. At the Board office, Morgan McNeil, who recently completed her Masters in Soil Science, has joined us as a Junior Agronomist. Morgan will help increase the amount of research we can do locally, and growers have shown they are keen for this information.

Communications with elected and senior government

officials both provincially and nationally have continued this past year as part of our efforts to have science-based regulations and common sense approaches to enforcement. Board directors and staff have also been involved with discussions on land (including the Lands Protection Act), water (the Water Act and proposed regulations), pesticide re-evaluations on the national level, cost recovery, market access and phytosanitary concerns.

A new initiative over the past year has been our Quality Assurance Program involving visits to PEI grocery stores and to the farmers/packers that supply those stores. Despite a very challenging crop in 2018 due to a rough and often smaller size profile crop, there was better quality on Island shelves. We had less consumer complaints in 2018/19, and more satisfied customers. Thanks to David MacSwain who coordinated this work for us, and to our farmers and packers who responded well to the initiative.

We have continued engagement and outreach efforts with Islanders to help connect farmers and our industry with the public. These include our sponsorship of several local events, including Farm Day in the City, Toe Taps and Taters, Patrick Ledwell's Island Review, the Festival of Small Halls and many others. We've also done an editorial board with CBC this year, and we continued to develop our audio-visual inventory that enabled local and regional airtime of our "It Takes an Island" commercial. Several young farmers shared information on their farms and our industry via radio spots this year and those airings were well received. Social media is also a major initiative for the Board. Communications with the general public take a huge amount of time, but it is essential to tell our story so that others do not fill the void.

The Board has also worked on our governance this past year. A new long term strategic plan has been developed and was presented at our AGM, and we have been working with the provincial government to amend our regulations in order to change producer eligibility (to allow more young people to become involved with our organization and vote on industry issues) and to change move back from four districts to three going forward. We also look forward to welcoming three new directors, Becky Townshend, John Griffin and Donald Stavert, to the Board this month.

While most of the things I noted earlier are part of longer term efforts on the part of the Board, the terrible growing conditions in 2018, and in particular the wet fall and early, devastating freeze up that left 6,900 acres of potatoes unharvested and many other important fall activities like

cover cropping, fall plowing, and so left undone, resulted in the Board spending considerable time and effort in working on disaster assistance to address the extraordinary costs arising from the harsh weather. Working closely with our provincial government and with excellent support on the part of now Deputy Minister Brian Matheson, the Board was successful in its efforts to have our federal government and provincial government allocate over \$15 million in Agri-Recovery funding for our farms. Newly elected Premier Dennis King and Veterans Affairs Minister Lawrence MacAulay announced the funding in August, and the farmers received the cheques in October. We thank our MPs for their support, as well as previous Agriculture Minister Rob Henderson, new Minister Bloyce Thompson and our crop insurance agency for recognizing the hurt and responding to it.

We're also pleased that Jacqui Scaman will be part of our Marketing team this coming year. Marketing Director Kendra Mills is on maternity leave following the birth of her son, and we wish her and her family the best! Mark Phillips will continue in his enhanced role in marketing, and Kaley MacDonald-Butler will join the Board as Interim Marketing Director on a part-time basis in Kendra's absence.

The Board nominated director Rodney Dingwell for the Atlantic Agricultural Hall of Fame, and we were pleased to see Rodney receive this well-deserved recognition in October. Congratulations Rodney! I want to thank the Board's staff for their dedication, commitment and hard work. The value you provide our industry and our farms is greatly appreciated. I want to thank the Board Executive and the rest of the Board of Directors for all the time and effort they put in over the past year on behalf of our industry. They came to meetings prepared, and reached out to fellow growers for feedback and direction throughout the year. That helps us make the best decisions possible. Special thanks go to Rodney, David Francis and Harris Callaghan as they complete their terms as directors on the Board.

I also want to thank my family and dedicated employees who make things run smoothly back on the farm in my absence.



POTATO BOARD NEWS

Meeting with Premier King

Representatives of the Potato Board had a face to face meeting with Premier Dennis King on October 30th. The Premier was thanked for the provincial government's support of Agri-Recovery funding for Island farmers who incurred extraordinary costs in 2018, and an update on the 2019 crop year was provided. Issues of importance to the potato industry were then discussed, including the Board's support of the Lands Protection Act; the need for additional funding for on-farm mitigation measures to protect soil and water resources, as well as changes to environmental regulation and enforcement; the Water Act and the need for credible, independent, third party research on irrigation for agriculture, including the economics; and marked fuel.

New Board Executive

Following the annual general meeting of the Potato Board on November 20th, a new executive was elected for the 2019/2020 year. Jason Hayden will Chair the Board of Directors again for the coming year, and will be joined by Wayne Townshend as Vice-Chair, and John Hogg as Secretary-Treasurer. The Board looks forward to continuing to raise issues of importance for the industry, and welcomes input at any time from farmers and other industry members.

Annual General Meeting

The Potato Board's annual general meeting was held at the Board office on November 20th. The well-attended meeting included remarks from the Honourable Bloyce Thompson, Minister of Agriculture and Land, our Chairman Jason Hayden, and the presentation of financial statements for the year ending June 30, 2019. Minister Thompson commended the growers for the contribution they make to the Island, and shared that the agriculture sector's need for Agri-Recovery funding was a high priority shortly after his government was formed. The Minister said that work is underway to modernize the Lands Protection Act, and stressed how important the land is for the future of agriculture as well as our province. He also touched on climate change, and commented that agriculture should be the solution for carbon sequestration rather than a source of emissions.

Alain Rabeau of the Intersol Group worked with the Potato Board, directors, staff, growers, other industry members and key partners in both levels of government on a new strategic plan for 2019 – 2024, and it was presented during the AGM.

Board staff presented updates on the seed, tablestock

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and processing sectors, as well as an overview of research and environmental work. The challenges the Board has had in finding a clear mechanism to collect levy on the on-Island sale of seed potatoes since CFIA changed its approach to information sharing was also discussed, along with a request for feedback from growers as to how best to do this going forward.

Kevin MacIsaac, General Manager of United Potato Growers of Canada presented the estimated potato production for the US and Canada, which showed a major decrease in supply for the 2019 crop across North America. Mark Phillips, Marketing Officer at the Potato Board finished out the presentations by sharing updated pricing information for the 2019 fresh shipping season (year to date) versus previous years.

Copies of the annual report are available at the Board office.

AAFC Potato Breeding Program

For the past few years, the Potato Board, in conjunction

with the Canadian Potato Council, has been working more closely with Agriculture & Agri-Food Canada to seek improved output from the national potato breeding program.

AAFC has one potato breeder for all of Canada, and the program is headquartered in Fredericton. The program does, however, have access to other AAFC professionals, equipment and technology to enhance those efforts, and in response to feedback from the potato industry across Canada, changes have been made over the past two years to better align the efforts to the needs of the industry.

The Canadian potato industry has put additional resources, both funding and time, into variety evaluation trials across Canada as part of the most recent research cluster, which runs from 2018 – 2023. As well, many farmers, grower organizations, fresh packers and processors spend a great deal of time and effort outside of the research

The Potato Board is looking for industry at-large representatives to sit on the following committees:

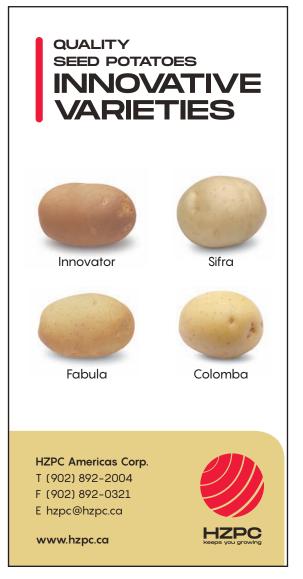
Farm/Seed Committee (1)

Tablestock Committee (2)

Farm Practices Review Board (1)

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cluster to evaluate potential new varieties and to develop crop management profiles for promising varieties. Those investments of time and money are not currently captured or officially recognized when AAFC assesses cost-sharing ratios for funding.



The importance of potato varieties that work well with the unique growing conditions and markets in Canada has never been greater. We've seen more wet springs and falls, and much dryer summers in our region, and we need varieties that will do well under our shorter season conditions. The Board was encouraged by the stronger turnout at the Potato Variety Open House at Harrington in August, and we encourage growers and others in the industry to become more familiar and involved with the fresh, chipstock and processing lines that AAFC is now developing. AAFC is open to this, and we need to ensure our needs are clearly identified and that our elected federal officials know how important it is for us to have high yielding, shorter season varieties that meet our needs and will enhance our environmental and economic sustainability. Your input is always welcome. For more information on this, please contact Mary Kay at the Board office.

Marketing Report

by Mark Phillips and Kayley MacDonald Butler

Firstly, we'd like to congratulate Kendra Mills on the birth of her first child Robert Barry Brian Moore. Robert (Bobby) was born in the early morning on October 27th, weighing 7lbs 14oz. From all accounts, everyone is happy and healthy. Kendra has started her maternity leave, and Kaley MacDonald Butler has joined our staff to fill her

Kayley MacDonald Butler

position for the term. Kaley has over 10 years' experience in marketing with the Province of Prince Edward Island as the Seafood Marketing Specialist. She will continue her role there, while splitting her duties with the Potato Board. Her work experience will be very valuable to our organization, and her involvement in activities with the

Food Island Partnership will allow her a smooth transition into our industry. Before her work with the Province, she worked with Mid-Isle Farms and Food Trust for a year. We are happy to have her join us.

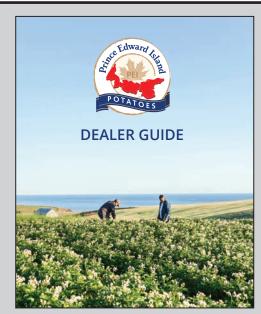
We are excited to announce that our third year of our media campaign is underway. We've partnered with Halifax media company, MW360, to help execute our media goals. By learning and building from our previous campaigns, we are able to get the most out of our media investment. We are currently featuring the original cut of our commercial online and on PEI television. We strategically run our PEI promotion to coincide with harvest season, when potato production is top of mind. While this timing works for PEI, generally our potatoes are not prominently featured in stores in eastern Canada yet. For Atlantic Canada and Ontario, we wait until January when potatoes are featured in most stores to start our promotion. We are currently in the planning stages of a public relations program that will coincide with the second part of the media buy. Last year we used social media influencers including Janette Ewen to partner with other companies for a collaborative promotion including PEI Potatoes. Our PEI Potato Vignettes are now available, and ready to be promoted. With the extra content remaining from the commercial shoot, we partnered with Furrow Content to produce seven educational short videos. In addition to a general introduction video, there are videos on planting, growing, harvesting, grading, family tradition, and uniqueness. This is a great educational tool to show our customers, buyers, and students how we get our spuds from seed to the table. We released the planting video in

the spring. The harvest video was promoted as part of our Fall Potato Pantry. We are going to continue to promote them as the season lines up with the highlighted subject.

Working with other members of Food Island Partnership, we are currently developing an online Food Island Book. The book will highlight PEI's premium food products including potatoes, beef and seafood. We have been a partner on developing new photos through the asset development program which will be used as content in the book. The book will focus on the people, products and place and why we are proud to be Canada's Food Island.

Mark Phillips and Greg Donald conducted retail visits in the US northeast in early October, and in Ontario in early November to promote our ad incentive program and discuss how to best promote PEI Potatoes in-store.

PEI Potatoes were represented by Mark Phillips at the 70th annual Produce Marketing Association Fresh Summit October 17-19. Over 24,000 people attended this year's summit which featured over 1,200 vendors. A key takeaway from PMA's state of the industry session was that today's consumers are focused on packaging, waste and energy. In every aisle of the grocery store, consumers are looking for convenience - produce is no exception. In short, convenience, sustainability, and environmental care were the hot topics. Presenters felt that produce is in a great position to benefit from current food trends. Up next is the New York Produce Show December 11-13.



The new and improved dealer guide is now available. The design allows potential buyers more insight into what each of our dealers can provide in order to best help them find a dealer to meet their needs. Users can sort based on regions, markets, and products. Copies are available online or at the Board office.

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Water Act Consultations

Draft regulations have been released to accompany the new Water Act which was introduced in 2019. The current set of draft regulations deals with control of water extraction and outlines how much water can be drawn from wells, watercourses and wetlands. Consultations took place across the Island during the last two weeks of October in workshop style format. For those unable to attend the meetings an online survey was available between October 22 and November 8, 2019. The Potato Board has provided a submission on behalf of Island potato producers. Board staff and directors and several individual growers took part in the consultation sessions.

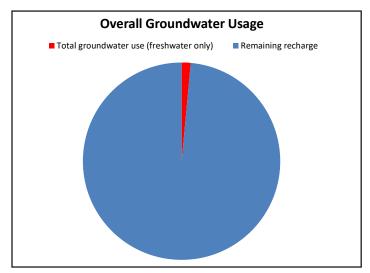
Some of the major changes to the regulations which are proposed and would affect farmers include:

- change from two well capacity categories to three with permits required for the top 2.
- multiple wells may no longer be used to fill one water storage facility. Changes to conform with this requirement must be in place within 5 years.
- the moratorium for high capacity wells to be used for agricultural irrigation continues and will be put in regulation.
- there is no allowance to allow for facilities to conduct research on the use of agricultural irrigation.
- An exemption is in place to allow water extraction to fill water tanks on sprayers and water trucks for the application of crop protectants.

A key point in the Board's submission was the need for equitable access to the water resource for all industries. The following text is excerpts from the submission the Potato Board made in repsonse to the draft regulations:

"It is the stated position of the Prince Edward Island Potato Board that the current moratorium on high capacity wells for agricultural irrigation, which was initially established for one year and has been in place for 18+ years, should be lifted provided that there is no demonstrated adverse effect on water supply and the environment. The Board has advocated for additional scientific research and water use monitoring to assess current water resources and to inform future water extraction.

With this in mind, the Board is very disappointed to see that the proposed water withdrawal regulations following the introduction of the Water Act propose to permanently ban additional high capacity wells for agricultural irrigation. There is no data that suggests that current water use for irrigation is unsustainable; in fact, data from the PEI Department of Environment, Water, and Climate Change indicates that current water extraction for irrigation (including both agriculture and golf courses) only represents 2% of current water usage, and that current total provincial water usage for all sectors and households only amounts to 3% of the available annual recharge. This demonstrates that on a provincial basis there is no shortage of groundwater resources. While groundwater extraction must be evaluated on a local/watershed basis, there is



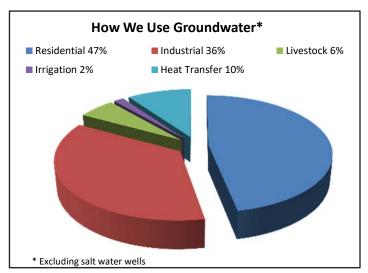


Figure 1. The above graphics showing PEI groundwater reserves and how we use our groundwater are from the PEI Department of Environment, Water and Climate Change - Summary of Groundwater Usage - November 2017. (https://www.princeedwardisland.ca/sites/default/files/publications/groundwater_usage_summary.pdf) The industrial use is primarily for food processing and fresh water for aquaculture.

most definitely not the kind of groundwater shortages that have necessitated irrigation restrictions in other agricultural areas. A continuation of the moratorium on high-capacity wells for agricultural irrigation without demonstration of adverse effects on water resources would not be in keeping with the stated goals of the Water Act.

A matter of fairness:

At the core of this issue is the fundamental unfairness of restricting water access for agricultural irrigation. All other Island businesses and industries (such as aquaculture, golf courses, tourism, etc) have access to high capacity wells for water extraction, while farmers do not have the same access despite an absence of any data demonstrating that irrigation is having or would have a detrimental impact on groundwater. This discrimination infringes on the rights of Island farmers to access a public resource to which all other industries and persons in the province have access (with appropriate controls/monitoring to ensure sustainability of this critical resource).

The Board has been collaborating with individual farmers and multiple research partners on investigating best management practices such as use of cover crops, soil-building crops and reduced tillage practices aimed at improving soil organic matter, which helps to hold more water in soil. At the same time, the 4R nutrient stewardship initiative and other research by the industry has focused on improved use of fertilizers to reduce the risk of nutrient leaching or run-off, matching the rate of nutrient application to the needs of the crop. We are also actively seeking the development and use of potato varieties which would better withstand dry conditions and work better under our conditions.

Research and extension efforts with producers on improving environmental sustainability have been increasing every year. At the same time, it must be recognized that improving soil organic matter levels and decreasing nitrate levels in groundwater are long term initiatives that can not be turned around in just one or two years. Manure is one of the best ways to maintain and build organic matter, but the decline in livestock numbers in our province for the past few decades means other ways of building the soil must and are being used. Responsible access to groundwater for agricultural irrigation is a tool that should be available to growers who are actively working on improving the sustainability of their production practices; in fact, responsible use of irrigation would allow growers to make better use of nitrogen, reducing the amount of residual nitrogen at the end of the season that would be at risk of leaching. It would also provide growers with the water needed in a dry year to ensure the economic sustainability of their farms, allowing growers to invest in soil-building efforts and sustainable crop rotations that build soil resources for the future. It is difficult for farmers to invest in soil resources (which often don't have immediate payback) if they are denied access to tools which, when used sustainably (as confirmed by appropriate controls and monitoring that should apply to farmers as well as to all other users of high capacity wells), can provide more stable yields and returns.

Therefore, the Prince Edward Island Potato Board would like the proposed regulations to be amended to remove the repeated specific clauses prohibiting permits for high capacity wells for agricultural irrigation."



Practices that contribute to agricultural sustainability include (from top to bottom) strip cropping, residue tillage, and use of a cover crop after harvest.

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PMANA Update

The 2019 PMANA Fall meeting was held on November 11th at Harrah's Ak-Chin Resort outside of Phoenix, Arizona. The meeting focused on the reports from the processing States and Provinces attending and concluded with a discussion on the upcoming 2020 contract negotiations for processing potatoes. There were 34 participants representing eleven North American processing areas. Ontario and Idaho were not in attendance. The PPC sent two reps: Chris MacAulay and Scott Howatt. This article consists of the consolidation of the details from the Area reports and concludes with an opinion from this desk.

Overall potato production in the 11 areas which attended the fall meeting is projected to be up 5,700,000 hundredweight (CWT) or 2.0% over 2018's production. 3.0 million CWT of this increase is projected in PEI alone, as the Island rebounded from the devastating 2018 crop which saw Island farmers having to abandon 6,900 acres due to terrible, wet and cold weather conditions during harvest. When USDA's NASS numbers for Idaho's potato production are added into the calculation, the overall production reverses, down 3.3 million CWT in the PMANA areas. Thirdhand reports from Idaho indicate less acres planted in 2019 versus 2018, a lower yield per acre across most potato acres, and an early arrival of winter causing this significant decrease in overall potato production in Idaho in 2019.

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These projections make 2019 the third crop year in a row in which potato production across PMANA growing areas is lower than the year before. This comes despite there being 7,500 more acres of potatoes planted in 2019 over 2018 in these jurisdictions. Same as in 2018, the reason why overall production is lower, despite greater acres being planted, is terrible weather brutally robbing growers of significant portions of their crops. From a devastating hail event in southern Alberta in August, to the heavy and unrelenting September rains in Manitoba and the American Midwest, to the final blow of a severe arrival of winter in Alberta, Manitoba and North Dakota, individual potato growers have had to abandon acres in the ground; especially difficult in Manitoba where this has now happened two years in a row.

With all this turmoil, the few open processing spuds available in the Columbia Basin, Idaho and the Atlantic Northeast (Maine, New Brunswick, Quebec and PEI) are fetching strong prices, being driven by processors and fresh market buyers competing for

the same limited supply of quality potatoes. Reps from Alberta, Washington, Oregon, and the Atlantic Northeast (ANE) reported very good crop quality regarding size profile and lower than normal grade defects. However, all Area reps reported on various issues of concerns, from bruise-free issues in the Columbia Basin and Oregon, to colour issues in Alberta, to lower than normal specific gravity in the ANE, to crop storability issues in Manitoba, North Dakota, Wisconsin, Maine and PEI.

On the demand side of the equation, North American processors continue to experience growing demand for quality frozen potato products, both domestically and internationally. In attempts to meet this demand, since 2015, Fryers have made very substantial investments of hundreds of millions of dollars into new processing capacity across Washington State, Idaho, Alberta, Manitoba and New Brunswick. When this announced capacity is added together it totals to 33,000,000 CWT of additional potatoes needed for processing from the 2019 crop compared to the 2014 crop year. This required additional production is the equivalent of the total potato production in both New Brunswick and the State of Maine, combined!

On top of these already-completed, new plants and new production lines, recent announcements have been made by McCain Foods for construction of new production lines to be completed in early 2021 in Othello, Washington and Grand Falls, NB. These plans place further demand for more processing-quality potatoes to be grown in 2020.

Conversations at the PMANA Fall meeting showed a common sentiment between growing areas: that the financial benefits earned by the processors since the upturn in the economies of the United States, Canada and around the globe are not being adequately shared with their growers. The last three years have resulted in contract growers having substantial financial challenges caused by major weather events / patterns stealing crops (at least once) in most of the regions that supply French fry plants across North America. Every PMANA grower organization reported that their members are not receiving enough financial return to address the multitude of risks involved in growing contracted potatoes for the frozen market.

The record strong demand created by the food service sector for both traditional frozen potato products (French fries) and for the various new specialty products developed by the fryers, has produced significant price increases for finished products over the past five years. At the same time, processing contract values in 2019 provide lower net returns to growers across North America than did their contract agreements in 2013. The pre-season contracts of North America over the last six years have not kept pace with the cost inflations experienced by growers. The monies needed to maintain a skilled work force, to buy crop inputs, to invest in the necessary technologies and equipment of today's agriculture, and to have a reasonable return are not in the contracts. The contracts are structured such that each grower must produce above average quality with well-above average yields to achieve fair returns on their investments. With the difficult and devastating weather patterns of the last three years, many North American growers are realizing

well-below budget returns. When the growers speak to this, it becomes clear that this situation is not sustainable; for neither the growers nor the processors who are investing hundreds of millions of dollars in expanding their capital infrastructure to sell more frozen potato products, while at the same time offering contracts to their growers which are pennies-on-the-dollar of these multi-million dollar investments.

So, what is to happen in contract talks for 2020? From this observation seat, if North American processors do not address this substantial lack of grower return for the risk that growers alone are taking, there will be a period of time where there will not be the quantity of processing quality potatoes available to run their new processing facilities. If a processor chooses to believe that this lack of supply will not happen, that company needs to reassess their situation, it is already happening... it's happening now.





POTATO GROWERS OF CANADA

LES PRODUCTEURS UNIS DE POMMES DE TERRE DU CANADA

Supply Outlook for 2019 North American Crop by Kevin MacIsaac, General Manager, UPGC

As this article is written in mid-November, we are working to provide input into the Canadian Potato Production Estimate which will be released by Statistics Canada on December 6, 2019. Following are some observations on how the potato crop in Canada turned out this year.

We felt that we would not have unharvested acres set a precedent in Canada for two years in a row, however this year's losses will likely even exceed those of 2018. Last year there were 17,650 acres left in the ground across the country led by Prince Edward Island and Manitoba. This year's abandonment could reach 20,000 acres, unfortunately led again by Manitoba, with 12,000 acres, followed by Alberta leaving 4,650 acres. The value of the potatoes left out in Manitoba fields alone would be around \$50 million, to say nothing of the storage issues these provinces are now facing. Manageable losses like 1.0% of planted acres in 2017, have climbed to 5.1% in 2018, and estimated to be 5.5% in 2019. These weather-related losses have certainly moved the level of risk in these late harvested crops and growers need to be compensated accordingly in the marketplace.

Overall production is expected to be up over 2018 and above the 5-yr average in Canada. PEI has an increase of 4.5% over the five-year average, after being able to harvest

United States Potato Production Estimate

USDA National Agricultural Statistics Service - Nov 8, 2019 - Top Nine States (million cwt.)

State	2017	2018	2019 Est.	Percent
Idaho	134,850	141,750	133,980	-5.5%
Washington	99,220	100,800	101,475	+0.7%
Wisconsin	28,475	27,135	28,980	+6.8%
Oregon	21,935	27,000	22,860	-15.3%
North Dakota	24,420	23,735	20,945	-11.8%
Colorado	21,220	21,722	19,666	-9.5%
Michigan	17,205	18,240	19,475	+6.8%
Minnesota	18,428	18,705	18,040	-3.6%
Maine	15,200	15,035	16,480	+9.6%
Total Fall	380,953	394,122	382,261	-3.0%
Crop 9 States				
Total U.S.	442,034	450,020	422,451	-6.1%
Crop				

most of the crop (1000-1,500 acres left) with an estimated 25,680,000 cwt. Yields are estimated to be in the 300-310 cwt/acre range. New Brunswick's production is estimate up 10% due to increased acres at planting, good yields, and no acres left. Quebec's also reported strong production and likely increases due to yield. Ontario is reporting 2019 yields at 200 cwt/acre, down slightly from last year's 205 cwt/acre. At 6,710,000 cwt, this would be their lowest production since 2016. Manitoba had a beautiful crop leading up to harvest and was expected to exceed last year's yield of 345 cwt/acre. Production, however, will be down over a million hundred weight from last year, even though an additional 3,500 acres were planted in the spring to supply the new JR Simplot plant, opening in Portage LaPrairie, in February 2020. Alberta's yield is estimated at 388 cwt/acre, down from last year's 415 cwt/acre. Production will be below 2018, again at a time when additional production is needed for the new Cavendish Farms factory, which opened in Lethbridge in August 2019. British Columbia fared off well this season with a good growing season providing yields and production above the 5-yr. average.

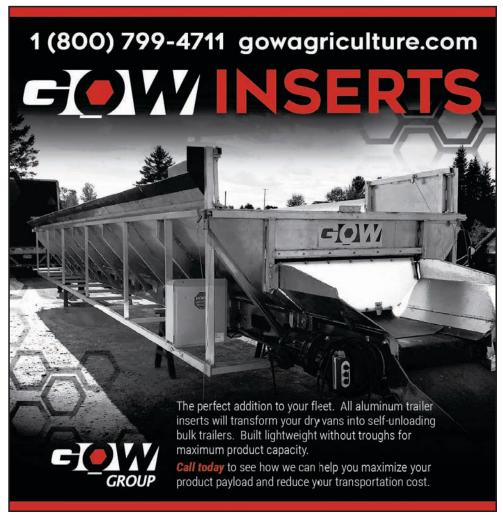
In summary, Canada's production is tight this year with an empty pipeline starting the marketing season and

expanding markets in the processing sector. The country was fortunate in all areas, to have its seed area dug early and before bad weather set in. Seed demand is high, particularly outside the country.

On November 8th, USDA NASS released their estimate of 2019 Potato Production in the United States. The accompanying table provides a summary of the top nine states producing a fall crop in 2019. USDA estimates production in those states to be down 12,401,000 hundred weight or 3% from the 2018 crop. This is a very significant decrease.

Production for Idaho, the largest potato producing state, is estimated to be down 7.8 million hundred weight or 5.5%. Yield/acre has decreased from 450 in 2018 to 435 cwt/acre for this crop. Surveys conducted by the United Potato Growers of Idaho puts the yield even lower at 427 cwt/acre. The growing season had been looking below average, but production was really

affected by a deep freeze on October 8th with 15-20% of the crop still out. Buyers are scrambling to lock up any existing open potatoes for processing and fresh. 12,000 acres of fresh, 12,000 acres of processing, and 2,400 acres of seed were affected by the cold. One of the other large decreases in US production is in North Dakota, with production down 11.8% or 2,790,000. Wet conditions prevented 14,000 acres from being harvested. Planted acreage in the spring had already been reduced by 1,500 acres down to 73,000 acres, setting a record for the lowest potato acreage since 1951. Minnesota production was also down due to heavy rains affecting the crop. Some producers in the Red River Valley were only able to harvest 50% of their crop this year. Estimated production in Colorado, a fresh producing state is down 9.5% or 2,056,000 hundred weight. In addition to yield reductions, planted acreage was down 4,000 acres as growers switched to other crops. Wisconsin, after a disastrous year in 2018 due to wet weather, has started back towards a more normal crop in 2019, although yields, according to growers, were still below average. Michigan shows an increase of 6.8% in production, but this does not take into account that 3,500 acres of chipstock were not able to be harvested after the production estimate was released.



Farm Day in the City



While many farmers spent the day in the fields on Sunday, October 6 to take advantage of a clear day in October, rare since harvest started, many folks enjoyed the good weather at Farm Day in the City 2019. Pictured below clockwise from top left: (left to right) Board staff member Debbie Hirst, and Elliot Watters and Emma Jean Griffin from W.P. Griffin Inc. are ready to serve up baked potatoes; Tate looks out over the crowd who filled Queen Street for the event; volunteers helped to staff the Cavendish French Fry wagon; and Board staff member Ryan Barrett answers consumer questions at the Potato Information booth. (Photos: Anne Phillips, Jacqui Scaman).



Canadian Certified Seed Acreage

	Cana	da		
	2019	2018	2017	2016
Russet Burbank	13,134	11,855	11,261	11,538
Goldrush	4,047	3,833	4,365	3,947
HO2000	2,308	2,338	2,337	2,179
Norland	2,107	2,192	2,114	1,855
Ranger Russet	1,846	1,700	1,902	1,708
Shepody	1,729	1,525	1,767	1,766
Eva	1,537	1,521	1,491	1,453
Dakota Russet	1,253	806	529	na
Atlantic	1,207	1,161	1,392	1,444
Chieftain	1,089	1,089	1,303	1,082
Prospect	998	1,366	1,220	na
Superior	937	910	1,044	966
Russet Norkotah	858	750	758	980
Ciklamen	854	1,016	na	na
Innovator	798	915	867	866
Perline	781	798	912	523
Umatilla Russet	774	770	539	578
Kennebec	707	782	984	1,055
Clearwater Russet	694	371	257	na
Colomba	623	563	404	328
Highland Russet	623	643	451	na
TOTAL ALL VARIETIES	57,235	54,183	53,780	52,718

^{*} Numbers provided by the Canadian Food Inspection Agency as of November 5, 2019. Individual variety information is only for those approved for release for marketing purposes.



2019 Passed Seed Acres*

Seed acres have been on a steady increase on a national basis to meet demand from increased processing capacity in the west. New varieties are coming on stream such as Dakota Russet, Clearwater Russet and Mountain Gem, but seed acreage of processing standards such as Russet Burbank, Shepody and Ranger Russet seems to be holding steady for now. Seed growers are all too aware of how fickle demand for seed of new varieties can be until the market has adequate time to evaluate them and determine where they fit.

In PEI, while our list of top seed varieties is dominated by those for the french fry processing industry, we continue to grow a wide range of varieties for fresh, chipping and specialty markets as well as to meet the specific needs of various offshore export markets.

As always, growers are advised to book their seed early!

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Prince Edward Island				
	2019	2018	2017	2016
Russet Burbank	1,957	2,014	2,243	2,181
Eva	1,529	1,498	1,465	1,421
Dakota Russet	1,174	760	498	na
Goldrush	1,025	1,031	1,434	1,345
Prospect	862	na	na	na
Shepody	848	655	905	699
Ranger Russet	642	623	709	616
Superior	514	422	574	405
Norland	479	594	449	356
Atlantic	450	424	454	483
Kennebec	412	435	522	592
Highland Russet	356	413	280	na
Mountain Gem	296	na	na	na
Innovator	272	401	390	392
Electra	252	na	na	na
Ivory Russet	217	84	25	na
Clearwater Russet	208	153	159	na
Chieftain	177	268	350	290
Dakota Pearl	131	213	153	186
Colomba	128	32	123	84
Reba	111	77	na	na
TOTAL ALL VARIETIES	16,944	15,782	16,521	15,537

An Update From the:

PEI Department of Agriculture & Land

by Lorraine MacKinnon, Potato Industry Coordinator



This fall, though not without its challenges, brought much improved harvest conditions compared to 2018, and I hear reports of very strong yields in certain varieties and in certain areas. Although storage may continue to be a problem in 2019, it's likely that most PEI potato producers feel much more positive and rested in November of 2019 than they did a year ago.

As we head into late fall and winter, there are several updates from the Department of Agriculture and Land that I'd like to mention, as well as some upcoming winter workshops and events.

NEW MINISTER MANDATE LETTER

Premier Dennis King has laid out his mandates for the provincial government. Some of the items the Premier has specifically asked of the Department of Agriculture & Land include a review of the Lands Protection Act, modernizing operations of the Agricultural Insurance Corporation, continuing to develop and deliver soil health policies and programs, investigate new crop types, and establish a farmland bank. Minister Bloyce Thompson has been tasked to implement these initiatives using evidence-based research, and in collaboration with industry and the public. Some activities are already underway to implement these mandates.

STAFFING CHANGES

Brian Matheson has officially been named Deputy

Minister of Agriculture & Land after acting in this role for several months after the spring election. Brian has a broad base experience across the department, and he knows our industry well. After the retirement of Barry Thompson from the Department of Agriculture & Land, Carla Millar has taken the role of Manager of Sustainable Agriculture. One of Carla's current tasks



Brian Matheson

is to find a replacement for Evan MacDonald, who recently left government to pursue a career in private industry. Look for an announcement on Evan's replacement soon; and all the best to both Barry and Evan.

NEW SOIL HEALTH TESTING PACKAGE & SOIL HEALTH WORKSHOPS

My colleagues Kyra Stiles and Bradford Rooney have

spent many months establishing a new soil testing service for farmers on PEI. In addition to the chemical analysis previously offered, this more robust soil health testing package also reports on physical and biological measurements, which are of increasing importance in building soil health. In preparation for the launch of this program, a soil health database was created. The goal of this new testing package is to promote soil health best management practices in order to enhance soil quality and soil health knowledge on PEI.

There is currently a special introductory price being offered on these soil tests, and if you're interested I encourage you to contact Bradford



for information on sampling and costs. I also would like to mention some upcoming workshops that Bradford and Kyra are coordinating that will provide more detailed information on the new soil health testing package, and will serve as an opportunity for producers with soil health reports from this fall to discuss the results. The workshop dates are as follows:

Tuesday January 14, 7-9pm Kensington AIC Boardroom

Tuesday January 21, 1-3pm

Charlottetown, AAFC Research Station Boardroom

Thursday January 23, 6-8pm

Montague, Cavendish Wellness Centre Alcove Room

Monday January 27, 1-3pm

O'Leary, Access PEI Boardroom

For more information please contact:

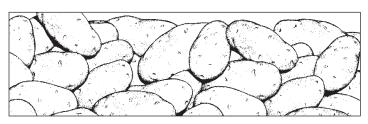
Kyra Stiles 902-316-1600 kstiles@gov.pe.ca Bradford Rooney 902-314-0791 brooney@gov.pe.ca

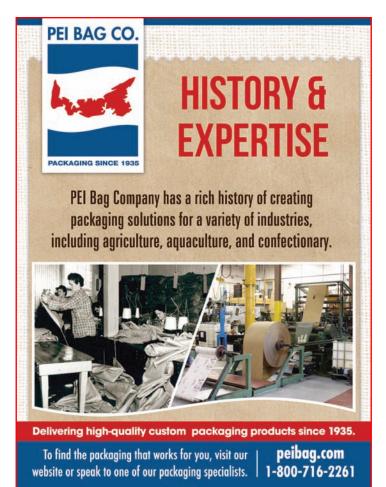
2020 INTERNATIONAL POTATO TECHNOLOGY EXPO, CONFERENCE AND INDUSTRY AWARDS BANQUET

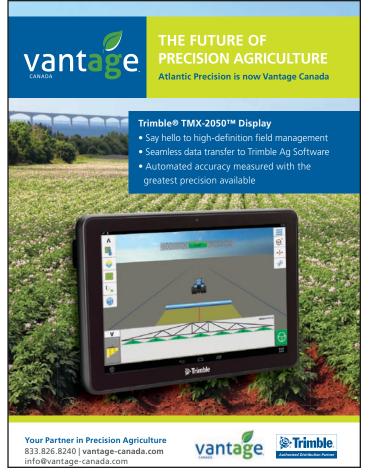
This biennial event is coming back to Charlottetown, and once again the trade show will be accompanied by a conference for the potato industry, as well as an awards banquet. The agenda is close to being finalized, and the PEI Department of Agriculture & Land is once again excited to be collaborating with the PEI Potato Board on this not-to-be missed two-day event. Speakers from across the globe will present ideas and experiences on a range of topics related to technology, business and agronomy. Be sure to mark February 21 and 22 on your calendars, and keep an eye for more details in the coming months!

2019 PEI SEED POTATO CERTIFICATION LIST AND GROWER DIRECTORY

This year's seed guide is now available on the website, and printed copies will be available and mailed out this month. In 2019, 16,944 acres of seed potatoes passed inspection; and seed acreage has been increasing over the past four years. Roughly 100 seed growers produced a wide selection of over 100 table and processing varieties. The online guide can be found at: https://www.princeedwardisland.ca/sites/default/files/publications/af_seedbook.pdf







Attention: Class A Pesticide Applicator Certificate Holders 2020 Training Course Schedule

There are three ways to renew your Class A Pesticide Applicator Certificate:

Option 1 - Continuing Education Credits.

Option 2 - One-day training course and write the exam immediately following.

Option 3 - Make appointment to write the two hour exam.

Option 1

The Department of Agriculture and Land will be offering the two different training days A & B for Continuing Education Credits. Certificate holders are required to attend one Day A and one Day B over the five year recertification period. Only one day per calendar year will be credited. All renewed Class A certificates, in the CEC program, have an expiry date of March 31. If you have taken the Day A & B as required you will be mailed a renewal form. If you did not take the Day A & B before your expiry date, you will be required to complete the written exam to obtain a new certificate. For the Day A & B sessions registration begins at 8:15 AM. Lunch and refreshments will be provided and there is a \$25 registration fee to offset this cost.

The 2020 Training Schedule is as follows:

Day A	January 7, 2020	Access Center, O'Leary
	January 14, 2020	Loyalist Inn, Summerside
	February 4, 2020	Rodd Royalty, TCH Charlottetown
	February 11, 2020	Lane's Riverhouse Inn, Montague
	March 10, 2020	Rodd Royalty, TCH Charlottetown
Day B	January 16, 2020	Access Center, O'Leary
	January 23, 2020	Loyalist Inn, Summerside
	February 6, 2020	Lane's Riverhouse Inn, Montague
	February 13, 2020	Rodd Royalty, TCH Charlottetown
	March 17, 2020	Rodd Royalty, TCH Charlottetown

Option 2

You can renew your license or obtain a new license by attending a one day training course and writing the exam at the end of the day. There is no cost for the one day training session. Participants are on their own for lunch. The 2020 schedule for the one day course followed by the exam is as follows:

January 22, 2020	Rodd Royalty, TCH Charlottetown
February 12, 2020	Mill River Resort, O'Leary
March 11, 2020	Loyalist Inn, Summerside
March 18, 2020	Rodd Royalty, TCH Charlottetown

Option 3

You can make an appointment to write the two hour exam by calling Debbie MacRae at (902) 368-5024 or Thane Clark at (902) 368-

5599 with the Department of Environment, Water and Climate Change in Charlottetown.

The five year certificate fee is \$75 (HST included) for a certificate obtained using any of the options available.

For any questions or to register yourself or staff for one of these training days please contact:

Muriel Power (902) 368-4154 or (902) 368-4880 mmpower@gov.pe.ca







In Memoriam

Allison Dennis 1935-2019

Allison Dennis was born in Port Hill on June 8th, 1935. He grew up on a small farm and started his own farming career when he was 22 years old. At that time his farm (Arlington Farms) consisted of a few dairy cows, some beef cows, and about 8-10 acres of potatoes per year. When Allison was 33, his father, and partner in the farm, passed away leaving him to continue on his own. Two years later, he suffered another major loss when a fire destroyed his barn and the majority of his livestock. With the help of his community he was fortunate to be able to rebuild and continue his farming career. During Allison's lifetime, he was involved in many sectors of agriculture. He had dairy cattle, beef cattle, and hogs at different times over the years. One thing that remained constant on the farm over the years was growing potatoes. This was always Allison's true passion.



Arlington Farms grew along with the potato industry on PEI. Allison was one of the first growers to convert to a processing contract with Cavendish Farms. He served as a Director on the PEI Potato Board for many years in the late 80's and through the 90's, and spent several of these years taking a leadership role as Vice Chairman and Chairman. He also took a very active role on the Processing Council, working on behalf of the grower community with Island French fry processors. He took great pride in growing potatoes and saw huge changes to the industry over his long career. Allison always enjoyed his conversations with other potato growers and farmers he met from across the Island and other potato

growing areas.

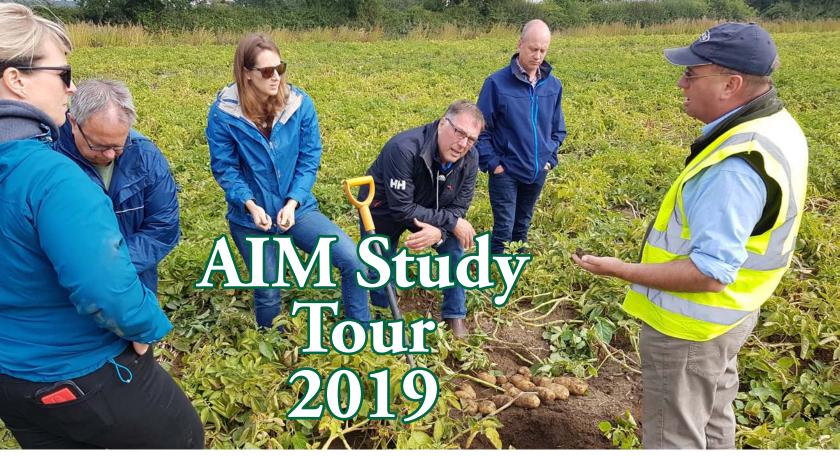


His community was very important to Allison and he took pride in being able to provide employment for people living in the local area. Allison continued to own and operate Arlington Farms until he was diagnosed with Dementia in late 2014. In early 2015, his grandsons, Bryan and Kyle Maynard, purchased a large portion of his farm and have continued the family farm under the name Farm Boys Inc.

Allison was a loving husband to Doris Dennis (Rodd) and father to Brenda, Beverly, Brent, Lorna, Lynda, and Lori. Allison also had 10 grandchildren and 5 great grandchildren.

Harvest season on the farm in Arlington, PEI. Photos courtesy PEI Potato Board and Anne Phillips.





by Ryan Barrett, AIM Project Lead

In early September 2019, members of the AIM Soil Improvement Working Group, along with two key industry partners, travelled to Europe to attend Potatoes Europe in Belgium, followed by a tour of research institutes and potato farms in south-eastern England. The goal of this trip was to investigate new technology and improved farming practices associated with improving soil health and soil quality in potato production. Lorraine MacKinnon provided a good overview of some of the technology and products on display at Potatoes Europe in Belgium in the last issue of PEI Potato News, so this article will focus on some of our farm visits in England.

NIAB – Cambridge University Farm:

The group travelled to Cambridge to meet with Dr. Mark Stalham (who spoke at our PEI Potato Conference in February 2019) and Dr. Elizabeth Stockdale of NIAB-CUF. NIAB (National Institute of Agricultural Botany) took over the Cambridge University Farm (CUF) in 2013 and is one of the primary research institutes in the UK doing potato research. They partner with AHDB (Agriculture and Horticulture Development Board), Rothamsted Research, and a number of other institutions on levy-funded research according to grower priorities. Dr. Stalham has been active in research on soil compaction, irrigation management, and rotation management in potatoes. Dr. Stockdale is primarily engaged in research related to soil health and soil organic matter.

We started our conversation delving a little deeper into

the survey work done with potato growers, which included what crops were grown, tillage and field operations performed, NPK applied, marketable yields, manure or compost applied, and what was done with crop residues. This information can then be used to assess the impact of different production practices (ie. use of cover crops) as well as the economic performance of different systems. One factor in the UK is that "brown waste" (ie. non-food compost) is more readily available and less restricted for vegetable production than in Canada, providing an additional source of amendments. From preliminary surveys, cover crops are associated with improved yields in potato rotation, and more data is being added every year.

We had a valuable discussion on the value of manure or compost in potato rotations. A recent project by NIAB had shown that four consecutive applications of manure could increase soil organic matter by up to 1%, which is a rapid rate of increase. In another experiment, manure was regularly applied to part of a field in contrast to no manure applied. Even after this experiment was discontinued and then brought back a number of years later, there was still a significant difference in yields between the areas with historical manure applied and those without. Treatments with manure always had improvements in bulk density and usually had better yields of multiple crops. While sometimes there was a short term effect of manure, the long term improvements to soil quality and yield were more important. As a result, it may be less important to target manures directly ahead of potatoes but in other parts of the rotation when it is easier to manage and food safety issues are minimized.

NIAB also had data to demonstrate the yield reductions that can result from soil compaction. One trial showed up to 6 T/ha (54 cwt/ac) yield loss due to soil compaction, even more than the difference seen from use of compost. Severe soil compaction can be equal to a moisture deficit of 200 mm in some fields. The key to fighting compaction is identifying how to prevent compaction as much as possible through smaller equipment sizes and controlled traffic, as well as mitigating compaction with deep tillage where necessary.

NIAB research on cover crops has shown that bulk densities in soil are consistently lower where cover crops have been grown. Oilseed radish is one of the most widely used cover crops due to amount of biomass as well as being a non-host for many soil borne diseases. Mustard, black or winter oats, and other grasses are also quite common. According to AHDB/NIAB economic evaluation, cover crops cost approximately £200/ha to establish but generally return at least double that value in net return to the farm.

East Anglia Farm Tours Euston Estate:

After leaving NIAB, we travelled north east from Cambridge to the Euston Estate near Thetford on the Norfolk/Suffolk border. The Euston Estate is a 10,500 acre hereditary estate owned by the Duke of Grafton and family. They have a mixed farming enterprise, including three chicken farms, a herd of Red Poll cattle, crops such as wheat, barley, and sugar beet, and a number of vegetable crops, including potatoes. All of their vegetable crops are grown on contract by the Abrey family, who live nearby and grow more than 2000 acres of potatoes and 8000 acres of total crops. Over 500 acres of their potatoes are grown at



Above: Anaerobic digester at the Abrey Farm.
Facing page: Tony Bambridge (right) talks about crop rotation with the PEI group (left to right: Lorraine MacKinnon, Steve Watts, Kyra Stiles, Karl Smallman and Andrew Lawless.

Euston Estate.

At Euston, they follow a seven year rotation. They also have an anaerobic digester for power generation, the majority of which is produced by growing corn silage. However, the liquid and solid digestate is a valuable source of organic amendments to go back on the land. The Abrey family also operates a digester, fed with corn and rye silage as well as vegetable wastes. They are able to use almost all of the energy generated from their 700 kW digester to power their farm and tenant properties, with very little energy sold back to the grid. These digesters became popular about 5 years ago in an effort to generate green power in the UK. They were accompanied by significant subsidies for establishment and operation as well as a 20 year subsidy for the price of electricity. As noted, they also return significant organic amendments back to the soil which adds additional value over and above the power generation. They estimate a 7-8 year payback time for the digester.

The soils in this area are approximately 15 inches deep of alluvial till with significant rocks that must be windowed to the side during potato rotation. They aren't removed from the field because it would be too large of a job besides being an issue with soil structure and drainage.

The Abreys and the folks at Euston Estate have been growing more cover crops in recent years to prevent soil erosion and build soil organic matter. Their preferred mixture at the moment is stubble turnips, oilseed radish and rye, because it is cheap and establishes well. The majority of cover crops are grazed by sheep or mowed during the winter. They direct seed the cover crops following harvest of cereal crops, at which time digestate or manures are also added to the fields. They have enough digestate to cover a quarter of their land each year.

The Abreys showed us a series of large reservoirs they constructed (with EU funding) to hold enough water to irrigate all of their vegetable crops. They operate more than 70 different reel and gun irrigation units each season, requiring considerable manpower to manage. To fill these reservoirs, they pump water from rivers during the winter and early spring to fill the reservoirs when water levels are high. They pump water from 17 miles away to fill these reservoirs...a considerable investment to ensure they have access to water.

B & C Farming:

B & C Farming is located just north of Norwich near Aylsham. We were greeted by Tony Bambridge, farm owner who farms with his daughter Sophie. They grow 175 ha (440 acres) of potatoes for seed and also grow some potatoes for fresh pack and French fry production with McCain

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and another processor called Birdseye. Russet Burbank and Shepody are among the varieties grown for seed and processing.

At B&C, they harvest seed primarily between August and September. Potatoes are harvested directly into boxes, minimizing the handling of the potatoes and making storage handling and grading efficient. They constructed a new Tong seed grading and sizing line last year, with which they are very happy. The grading line includes an optical grader for eliminating rocks and clods and an enclosed booth for hand grading to reduce dust and noise. Potatoes then proceed over a series of chain meshes that grade into four different sizes (30-40 mm, 40-50 mm, 50-55 mm and 55-60 mm). Potatoes under this size are graded out for cullage and potatoes over this size are graded out for cutting for some varieties or for fresh market destinations. The seed system employed at B&C and in much of the UK does not involve payment for seed in by the tonne but instead by the hectare to be planted. This takes into account the size of the seed and the required planting density. This incentivizes the seed producer to produce optimum sized whole seed of the desired size profile with increased tuber number, rather than relying on total yield per acre. The 40-50 mm size is seen as ideal, but producers will generally receive two different sizes of seed per variety and will be provided with planting density charts by variety and seed size. Only processing varieties like Shepody and Russet Burbank are cut (single cut) and they are cut and cured before they are transported to the seed buyer.

They don't warm seed up before they start to grade so as not to break dormancy and create condensation. They store seed at about 4 degrees C and employ positive ventilation to dry down the seed quickly with lots of air flow. They have been working closely with research institutes to optimize their storage and production over the years. Ethylene may used in a smaller storage for some varieties to encourage greater tuber numbers (mostly the creamer varieties).



Tong seed grading line at B&C Farms. Photos: Ryan Barrett.

As for crop rotation, the Bambridges employ an eight year rotation, with seed grown mostly on rented land that hasn't had potatoes planted in many years. Fresh and processing potatoes are largely on their own land or on land with long term rental. Their land is a bit less sandy than other farms we visited, with soil organic matter levels closer to 3 percent. Other crops grown in rotation include sugar beet, wheat, malting barley, grass seed, peas, and canola. Where they take straw off of fields they are sure to add back manure or other organic amendments. They have access to a municipal compost from aerobic digestion that is heated to high temperatures at least twice to reduce the risk of bacterial contamination. These amendments provide both nutrient value as well as adding structure to the soil and helping to maintain or build organic matter levels.

WO & PO Jolly:

We then headed southwest toward Thetford to meet with Will Jolly of WO & PO Jolly Farms. They have been farming for about 30 years in this area, on land that previously was not farmed because it was so sandy. However, with significant investments in irrigation, they have been able to get great yields of potatoes and other vegetable crops. They grow potatoes in an eight-year rotation along with free range pigs (for volunteer control), corn, carrots, parsnips, barley, sugar beets, and coriander. They also have a small acreage of semi-permanent asparagus near the farm. They own a block of land close to the home farm, but also rent quite a bit of land nearby. This is a family-owned and operated farm along with a small group of full time employees.

In three out of the eight years of rotation they apply some sort of organic amendment (mushroom compost, chicken manure, straw based manure, pigs). At the moment, they have significant soil disturbance every two years in rotation. Will's plan is to reduce soil disturbance by employing more grass in the rotation, which will also serve to build soil organic matter. At the moment, most of their fields are at 1 percent or less organic matter and the soil is very sandy, with a very abrasive quality of sand. This requires that they dig potatoes for direct delivery to processing plants, as they would have too much skin damage during harvest to store. As a result, they don't store any potatoes on the farm. The Jollys were the only farm that we visited that was entirely producing for processing. They have more control of variety choice than we have in PEI and they try and suit the variety to the needs to the field, depending on soil type and PCN resistance.

They are 100% reliant on irrigation, which they get from four 18 inch wells that are up to 100 m deep. All wells are metered and they have annual water limits that they have to adhere to. Will estimates that it costs them about £100



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per hectare per inch of water, which equals approximately \$700/acre for 10 inches of water per year.

Elveden Estate:

Our final farm visit was to the Elveden Estate near Thetford. Elveden is the largest hereditary estate in Britain, totaling 22,500 acres on the main estate. It is owned by the Guinness family of Guinness beer fame and they are very interested and involved in the success of the farm. We met with farm manager Andrew Francis, who gave us an overview of the farm and a tour of some nearby fields. In addition to the core estate (which includes guite a bit of forested or range rangeland), they have added another 18,000 acres of crop land in Lincolnshire and East Yorkshire. The Elveden Estate has very sandy land, much of which was only used for hunting and grazing for many years before investments in irrigation allowed them to bring land into arable farming production. In fact, they have over 100 miles of water mains to carry water to the many fields on their core estate. 2000 acres of potatoes are grown, in addition to 2000 acres of onions, 700 of carrots, 400 acres of parsnips, and a lot of combinable crops like wheat, barley and canola. Potatoes are grown primarily for fresh-pack to supermarkets through their private label Garden of Elveden branded business. They also grow 15,000 tonnes of processing potatoes each year primarily for McCain.

Elveden employs a six year crop rotation, alternating between vegetable crops and cereals. They have been doing research in recent years on the value of green manure crops and cover crops to help improve soil health and soil organic matter. They are doing some work with brown mustard as a biofumigant for PCN but are still trying to assess how well it works, particularly under dry conditions. The farm has also been experimenting with pollinator borders in some fields to benefit pollinator species as well as preventing spray drift and providing wildlife refuges. They are also employing some spray-on polymer products that are sprayed on the soil after onion planting to prevent soil erosion, as use of nurse crops is not possible in onions. These are quite

expensive but are seen as necessary to prevent soil loss at the moment.

Take Home Messages:

- UK potato producers are employing organic amendments as much as possible. While the UK has more animal agriculture and more population to PEI, it provides an example for finding opportunities to employ amendments as much as possible. This may require extension and research into how to best use the manure resources we currently have as well as gaining access to new sources.
- Most of the farms we visited are employing more cover crops to keep the ground covered as much as possible. Oilseed radish is widely employed, but there are a wide varieties of cover crops being used. Some are grazed by sheep or cattle, returning nutrients to the soil once again.
- Cover crops are generally associated with improved potato yields. This has been borne out both in research and in field conditions. Use of biofumigant crops is targeted particularly at PCN.
- 4. On light sandy soils in East Anglia, irrigation is essential. Finding ways to access water in PEI in ways that meet water regulations is key. This may require exploration of water capture/storage from the winter/spring run off in PEI where groundwater extraction is less feasible. However, any effort we can make to increase soil organic matter to improve water holding capacity should be undertaken.
- 5. There may be room to explore alternative seed production systems based on the UK example, with production of more whole seed or at the least, reduced cutting systems. This would require significant investment in sizing and handling equipment on PEI seed operations, as well as potentially a different pricing structure for seed to an acreage payment rather than cwt.
- PCN is a terrible scourge that we much avoid at all costs! The cost of PCN to the UK potato industry each year is staggering.
- 7. Finding opportunities to reduce tillage where possible is worth exploring. In PEI, we may have more opportunity to do that than the UK because we don't have to destone ahead of potatoes. Reducing tillage in the nonpotato years is particularly key.

The full trip report and photos can be found on the AIM agronomy website at www.peipotatoagronomy.com.

INDUSTRY UPDATES

Cavendish Farms Opens New \$430 Million Frozen Potato Processing Plant in Lethbridge, Alberta

October 3, 2019 - Cavendish Farms' newest plant is officially open for business. The announcement was made at a ceremony held today at the new Lethbridge frozen potato processing facility. Cavendish Farms President Robert K. Irving was joined by Alberta Premier Jason Kenney, Lethbridge Mayor Chris Spearman and other dignitaries to celebrate the largest private sector investment in the history of the City of Lethbridge.

"It is a great day for Lethbridge and for our employees, growers, suppliers and customers. Our new state-of-theart plant is up and running and will allow us to continue to serve key export markets around the world," highlighted Mr. Irving. "There were many reasons we were able to expand our operation in Lethbridge and grow in Alberta! It starts with the availability of high quality potatoes from local growers, the can-do attitude of our Lethbridge employees and the dedicated effort of the project team and the hundreds of vendors who contributed to this project."

"This new plant is a vote of confidence in Alberta. This is great news for Lethbridge, and for all those Albertans who will earn a living working at this potato processing plant. I would like to thank Cavendish Farms for making this

important \$430 million investment in Alberta. Alberta's food processing industry is growing in size and sophistication, and will be a key part of our government's strategy to expand Alberta's economy and create more jobs," says Premier of Alberta, Jason Kenney.

"Today we're seeing the result of what happens when industry and municipalities work together," says Lethbridge Mayor, Chris Spearman. "Cavendish Farms has invested in our community and invested in our future and we are thrilled to congratulate them on the opening of their latest state-of-the-art processing facility."

The new state-of-the-art plant replaces Cavendish Farms previous plant and will almost triple its production capacity in Lethbridge. The \$430 million-dollar plant spans the size of 7 football fields and will require 735 million pounds of potatoes annually. That's an increase of almost 12,000 acres over what Cavendish Farms currently contracts from local growers. With this expansion, the Lethbridge plant will now provide employment to 238 employees.

The project involved 2 million person hours of work for contractors during construction. Over 900 workers were on site at peak. Upwards of 110 Alberta companies were part of the project.



Robert Irving, President of Cavendish Farms Inc. (sixth from left), cuts the ribbon on the new Lethbridge processing plant with Alberta Premier Jason Kenney (fifth from left) and Lethbridge Mayor Chris Spearman (fourth from right) and other company representatives. Photo: Cavendish Farms.

World Potato Congress Inc. Announces New Director

October 17, 2019: World Potato Congress President

Romain Cools is pleased to announce Mr. Greg Donald has joined its Board of Directors.

Greg Donald has been the General Manager of the PEI Potato Board since 2009. The PEI Potato Board represents PEI potato producers working together to ensure long term profitability.



Greg Donald

and sustainability through

marketing, advocating, negotiation and activities that support quality potato production.

Greg has a BSc. Degree in Agriculture with a major in plant protection from Dalhousie University. He also attended the University of New Brunswick and obtained a Master's in Business Administration. Greg has over twenty five years of experience in the potato industry, including

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five years with McCain Foods in New Brunswick in the area of agronomy, potato production, potato procurement and green crop field management. He then spent 14+ years in progressively responsible management positions in the agricultural crop input business in Atlantic Canada and Maine with the Cavendish Group.

Greg also participates in a number of local and industry organizations including as a director with the Kensington North Watershed Association, a member of the Prince Edward Island Institute of Agrologists, a director with the PEI Farming 4R Island, a director of the Canadian Potato Council and a director of the United Potato Growers of Canada. Greg completed the Nuffield Scholar Program (an international agricultural adult education program) that included a study of the Potato industry in Belgium (processing focus), Holland (seed focus) and the UK (fresh focus).

President Cools stated: "The World Potato Congress is pleased to welcome Greg Donald to its Board. Mr. Donald brings a wealth of knowledge and experience in the potato sector and will be a great asset to the Board of Directors."

Welcome Greg!

McCain Breaks Ground on \$300 Million Expansion in Washington

McCain Foods USA officially started construction Oct. 15 on its new \$300 million, 170,000-square foot potato processing facility in Othello, Washington.

This investment will significantly expand McCain Foods' North American production capacity through the addition of a state-of-the-art battered and conventional french fry processing line. Moreover, deepening McCain Foods' commitment to Washington and the potato growing community, the expansion will bring an anticipated 180 new jobs to area residents and require approximately 11,000 additional acres, to be sourced from local potato growers in the region.

"Thanks to our passionate farming partners and hardworking employees, McCain Foods has a rich history of producing high quality food right here in Washington," said Dale McCarthy, Vice President of Integrated Supply Chain at McCain Foods North America. "This \$300 million expansion will deepen our roots and commitment in this great state and grow the potato industry for years to come."

McCain Foods Othello employs over 450 individuals who produce and distribute over 400,000 million pounds of frozen products. Completion of the project is anticipated in early 2021.

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McCain Foods Commits \$80 Million for Production Expansion in Grand Falls, New Brunswick Facility

O6 November 2019. Florenceville, New Brunswick – McCain Foods (Canada) announced today it will invest \$80 million towards the creation of a new Formed Potato Specialty production line at its existing Grand Falls, New Brunswick facility. The production expansion and creation of the new high-speed Formed Potato Specialty line enables McCain to meet the growing customer demand for the fast-growing market segment and also further strengthens the company's potato processing presence both in Canada and North America.

An estimated 80 new full-time jobs will be added to the production line once the facility expansion is completed.

"Today's investment announcement at our Grand Falls facility reflects McCain's commitment to the potato business in New Brunswick and to the people that live and work in the Grand Falls community," declared Dale McCarthy, Vice President of Integrated Supply Chain, McCain Foods North America. The new production line will be operational by early 2021 and will feature advanced technology for process efficiency as well as state-of-the-art food safety, processing and packaging equipment.

"Investing in the Grand Falls facility is a testament to the many successful partnerships McCain values with our local potato growers, employees and communities," said Danielle Barran, President of McCain Foods Canada. "McCain is a proud, Canadian family-owned business, where we continue to strengthen and grow our businesses in New Brunswick to meet the growing consumer demand for McCain potato products."

A strong, sustainable Atlantic Canada business opportunity

"Based on the Grand Falls facility expansion, there will be demand for an additional 1,200 hectares (3,000 acres) of harvested potatoes by New Brunswick potato growers in order to supply the new high-speed Formed Potato Specialty line," added McCarthy.

New Brunswick is a key potato-growing region in Canada, representing an estimated 15 per cent of the total Canadian production and acreage. New Brunswick potato growers are experienced, and many have established business relationships with McCain Foods. "With today's announcement, both the Grand Falls facility and the recent Florenceville expansion will provide McCain Foods with two of the largest Formed Specialty lines in the industry," concluded McCarthy. With few exceptions, McCain's potato products are made from local potatoes grown on farms close to their facilities, which are spread across Canada in New Brunswick, Manitoba, and Alberta.

Upcoming Events

Please call the Board at (902) 892-6551 for further information on any of these events.

December 2019

Dec 2-3	Canada/US Potato Meetings. Ottawa, ON.
Dec 4	Potato Association of America Seed Certification Section Meeting. Ottawa, ON.
Dec 9	AIM Workshop . Riverhouse Inn, Montague, 1:30 PM.
Dec 10	AIM Workshop . Emerald Community Centre, 9 AM.
Dec 10	AIM Workshop . Mill River Resort, 1:30 PM.
Dec 11-13	New York Produce Show. Javitz Convention Centre. New York City.

January 2020

Jan 14	United Potato Business Summit. Las Vegas, NV.
Jan 14-15	NPC Potato Expo, Las Vegas, NV.
Jan 29	United Potato Growers of Canada, PEI Conference. Red Shores, Charlottetown, PEI.
Jan 31	PEI Federation of Agriculture Annual Meeting. Charlottetown.

February 2020

Feb 6	New Brunswick Potato Conference & Trade Show. Ayr Motor Centre, Woodstock, New Brunswick.
Feb 21-22	PEI Potato Conference and International Potato Technology Expo. Charlottetown, PEI
Feb 21	PEI Potato Industry Awards Banquet. Charlottetown, PEI.



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Visit www.PotatoExpo.ca and register today to save 50% and fast-track your entrance to the show floor.

SHOW HOURS

Friday, February 21 9am - 5pm Saturday, February 22 9am - 4pm

STAY TUNED FOR OUR CONFERENCE SCHEDULE!













