# New Brunswick Soil & Crop News



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editor: Andrea Koch

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## Importance of Agricultural Resilience - After a Challenging Growing Season

by Andrea Koch

This past growing season has been a tough one for farmers who've been searching for a window of more than 2 days without rain. In May we had some reasonably nice weather to start planting and first cut; however, since then, persistent rainfall and waterlogged soils have caused challenges for crop growth, cereal and forage harvests. Many farmers have seen delayed first cut completion with starts on second cut on certain fields that drained better before being able to get on others for the first time. Certainly, in some fields especially in the Sussex region, corn looks very poor due to the oversaturated soils that have leached away valuable nitrogen which is evident in the yellowing leaves. Growth was also set back due to cooler June temperatures. Forage growth and harvest has been slow particularly on heavy clay soils which have less drainage capability with some farmers not having had the choice but to harvest while leaving ruts in the fields to beat the next rain. Apple producers also saw some challenges with the abnormal cooler, wetter temperatures bringing greater susceptibility to disease in their trees and fruit. These are just a few of the challenges farmers have experienced with the climate conditions experienced in New Brunswick this summer which advocates for the development of a farming environment that is better capable to adapt to varying conditions.

Agriculture resilience is a term that has recently become a focal point in the industry as a way to

strengthen the adaptability of soils, crops and livestock to changing conditions. Resilience refers to the capability to withstand challenges and pressures or recover from them with little effect on the original function or structure. A changing climate and the increased frequency of weather extremes is raising awareness to adapt practices that will strengthen agricultural resilience to ensure quality and productivity is maintained at the highest degree while continuing to protect the environment. A soil's resiliency is heavily dependent on its soil structure, whether it's composed of more sand, silt or clay. However, there are strategies that exist to improve resiliency no matter the soil type or location. To begin, it is important to ensure soil fertility and drainage are addressed and from there, there are several best management practices to improve soil resiliency.



The clouds almost never left this summer. *Photo from Beverly Booth* 

Diversifying crop rotations is a way to add different rooting structures which create channels and use different nutrients in the soil which can improve future crop production if stresses such as drought are present. Minimum-till and no-till systems also work to reduce soil compaction which improves water infiltration and water holding capacity. Utilizing cover crops and leaving crop residues on the soil can also improve water holding capacity by building up organic matter levels which has also shown to reduce the risk of erosion. These are just a few of the practices that can be utilized to ensure the adaptability and productivity of your soils in times of extreme or abnormal weather.

## Message from the General Manager

by Ray Carmichael



Certainly, this season has not been "farmer friendly" with many normal field operations delayed or made impossible by the continuous rain, from seeding to harvest. The NBSCIA- NB2324-0090 Establishing Alfalfa with Corn was abandoned due to planting delays. With SCAP funding from the NB2324-0287 NB Weather Monitoring, project, Andrew Sytsma has posted monthly summaries from May to September on our website. There are also comparative maps to the end of August for 2022 and 2023 showing rainfall and CHUs, I encourage you to have a look.

From the beginning of OFCAF in 2021, NBSCIA has helped 166 New Brunswick farmers implement projects on over 37,000 hectares (91,429acres), for the fiscal year ending March 31,2023. Applications for OFCAF funding for 2023 were opened mid-March and available funding for Ultimate Recipients (farmers) was exceeded by May 31 and there is no indication that additional funding will be avail-

able for this fiscal period ending March 31,2024. NBSCIA has been advised that the OFCAF program will be extended for the next fiscal year ending March 31, 2025, however there may be some change in eligible BMPs.

It's never too early to start thinking about beneficial management practices (BMPs) that store carbon and reduce greenhouse gases (GHGs) on your farm. Watch for updates and stay in touch with your local coordinator (they will be the first to know) for an announcement as to when the next intake of applications for 2024 will occur.

In partnership with Farmers for Climate Solutions, NBSCIA held eleven in-field workshops in all regions of the province during the summer, highlighting beneficial management practices (BMPs) that store carbon and reduce greenhouse gas emissions, specifically in the areas of 1. nitrogen management, 2. cover cropping and 3. rotational grazing practices. A total of 226 individuals attended of which 102 identified as farmers, 99 as professional agrologist or certified crop consultants and 27 others. NBSCIA wants to thank the member hosts that graciously gave of their time and facilities to support the sessions and of course the speakers who lead the sessions.

Farmer of the year judging has been completed. This year's candidates included Northwest-Marcel Daigle, Oscar Daigle Ferme, Chignecto- Clarence Estabrooks, Moncton-Garth Morton, Bonnielm Farm Ltd., and Central-David, Ida & Jeremy Duplessis. Thanks to our judges Walter Brown, Katie Robinson, David Walker and Andrea Koch.

## OFCAF program and application details are available by contacting:

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Central Andrea Koch (613)262-5546 central@nbscia.ca

Funding for this project has been provided by Agriculture and Agri-Food Canada through the Agricultural Climate Solutions – On-Farm Climate Action Fund.



Derek and John Robinson, Co-owners of Hazel Hill Farms and Chantal Myers, Senior Project Officer, On Farm Climate Action Fund, AAFC Ottawa beside a Rubin 10 vertical tillage implement. The OFCAF program assisted the Robinson's with the purchase of the Rubin 10. Vertical tillage implements incorporate nitrogen fertilizers and manure reducing odors and nitrogen losses from volatilization. *Photo and caption from Dave Walker* 



Nick Brown, owner of Brownsville Farms, Chantal Myers Senior Project Officer, On Farm Climate Action Fund (OFCAF), AAFC Ottawa and Ray Carmichael NBSCIA OFCAF Manager beside a vertical beater manure spreader. The On Farm Climate Action Fund supported Nick in the purchase of a vertical beater manure spreader. Vertical beater manure spreaders distributes manure evenly allowing for easier soil incorporation which improves nutrient efficiency and reduces manure odors and greenhouse gas emissions. *Photo and caption from Dave Walker* 

## 2024 Annual General Meeting

Planning is underway for our upcoming 2024 New Brunswick Soil and Crop Improvement Association Annual General Meeting which will be taking place at the Fredericton Inn on March 14th and 15th. This year we are collaborating with Agriculture and Agi-Food Canada's Living Labs who are hosting a technical session on March 13th for agriculture professionals and stakeholders. The theme for both events will be focused around data collecting technologies and how they can help to monitor and improve resilient agricultural practices. These events bring professionals from across Canada to speak on new advancements and current goals in agriculture.

Stay tuned for more information on the speakers and registration for the events!



Photo from Ray Carmichael.

## **2023 NBSCIA Directors**

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## **Regional Field Days This Summer**

In conjunction with Agriculture and Agri-Food Canada's On Farm Climate Action Fund (OFCAF) and Farmers for Climate Solutions, the New Brunswick Soil and Crop Improvement Association held several field days on the topics of nitrogen management, cover cropping and rotational grazing throughout the summer. Farmers for Climate Solutions is a farmer-led program available across Canada that provides free, region-specific resources on how to improve farm resilience and reduce emissions based on the three topics listed above. These events were hosted by farmers who shared their experiences with adapting one or several of these best management practices to their farm operation. Local experts also attended these sessions to speak on how these best management practices can be utilized on farms in New Brunswick.

## Rotational Grazing - A Look Beneath the Pasture

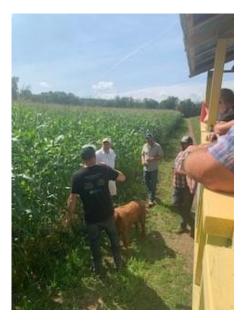
by Andrea Koch

On July 28th the central region soil and crop put together a rotational grazing field day that was hosted by Coburn Farms in Keswick, New Brunswick. Rather than focusing on pasture rotation and paddocks, the theme focused on soil quality characteristics and forage selection to promote pasture productivity. Soil pH is the number one factor in determining what nutrients will be available in the soil to promote plant growth. Maintaining within a pH range of 6-7 will ensure that existing and added nutrients in soil will be in available forms to the root systems of plants. Lime is the best way to raise your soil pH. Guest speaker Jason Wells a specialist in forage production from the New Brunswick Department of Agriculture, Aquaculture and Fisheries brought several grasses to explain their properties and suitability to pasture production. The main differentiations between grasses are whether they are jointing or non-jointing. In non-jointing grasses the growth point remains at the base of the plant which makes it a good choice for grazing vs a jointing grass where the growth point will move up the stem as it matures. If these types of grasses are grazed the growth points can be chewed off and thus negatively impacts regrowth.

There were 11 people in attendance to the event including some farmers and departmental staff from New Brunswick Department of Agriculture and Agri Foods.



Coburn's beef pasture. Photo from Tyler Coburn



Crop tour at Coburn's. *Photo from Andrea Koch* 

## **Opportunities Revealed by Crop Diversity**

by Andrea Koch

On Wednesday, August 9th the central region soil and crop organized a cover crop and nitrogen management field day which was hosted by Connor Farms. Discussion began on the topic of nitrogen management with Andy Brennan, the manager of Hartland AgroMart, speaking on the topic of enhanced nitrogen fertilizers. Enhanced nitrogen fertilizers are those adapted to minimize the potential for nitrogen loss into the environment either through leaching or volatilization. There are several products available on the market that provide nitrogen in a way that is made available at a slower rate. Polymer coated urea is a product when the nitrogen granule is coated in a plastic coat which will breakdown and release N over a long period of time when exposed to mois ture. Urea with nitrogen stabilizers reduce the capability for nitrogen to be volatilized and leach out when broadcasted. Polymer coated urea is not something farmers in New Brunswick use as rain fall events to break down the coating can be variable, thus providing an unreliable source of N that may not be available until after the crop is harvested in the fall. Stabilized nitrogen sources have also been slow to uptake in the Maritimes with the lack of peer reviewed research available to support its efficacy in the Maritimes. Therefore, the task remains for the farmer to ensure they are applying no more than what the plant requires based on soil nitrogen availability as well as selecting the appropriate application timing to ensure uptake from the plants.



Soybean nodulation in Connor's soil. *Photo from Andrea Koch* 

Dave Walker the NBSCIA research associate and cover crop specialist for our region provided a brief outlook on the OFCAF program followed by leading a discussion on the use of cover crops in New Brunswick. Challenges remain for incorporating ground protecting cover crops into the typical cash crop rotation with the shorter growing season in the maritime region. Inter-seeding single or a mixture of cover crops into established cash crop stands or broadcasting cover crop seed before harvest are potential options to ensure cover establishment before killing frost; however, the success of these strategies is variable based on year-to-year conditions.

Further into the afternoon, the Connors lead us on a tour of their soybean and long-term pasture fields. Last year, through the assistance of OFCAF funding, the Connors purchased a no-till seeder which they used to plant the majority of their crops this year. The soybeans seen looked very healthy and productive with potential for a good yield this fall. Looking at the roots, many nodules were present and active indicating the activity of the rhizobia bacteria which convert atmospheric nitrogen into a form usable by plants. Klay Ansems, the maritime representative for Maizex provided some notes on the soybean variety test plots on the farm and also shared some cover cropping strategies that he has seen used by Nova Scotia producers.

The turnout for this day was good with 21 attendees overall from local farms and Department of Agriculture staff.



Discussion on what makes for good soil structure.

Photo from Andrea Koch

## **Northshore Field Days**

by Gabrielle Schenkels

Members in the Northeast were happy to come out for the Nitrogen Management Field Day hosted at Grants Brook Farm in Robertville on August 17<sup>th</sup>. In cooperation with Agriculture and Agrifood Canada's On-Farm Climate Action Fund (OFCAF), Green Diamond and Farmers for Climate Solutions, over 30 producers, agrologists and their families came out to learn about the latest in nitrogen management technology and management practices.

Green Diamond was happy to showcase the Artex vertical beater manure spreader and discuss different models that would best suit individual farmer's needs. We even got to see it in action after a ride through some well-established alfalfa fields! We also discussed the Lemken vertical tillage harrow and the benefits of shallow tillage in a continuous



Artex vertical beater manure spreader. Photo from Gabrielle Schenkels

cropping system. Pat Toner presented different nitrogen management practices from the 4R system, biological sources of nitrogen, the biggest risks for volatilization, and manure management for nitrogen retention. Daniel Paulin also discussed



Pat Toner's presentation on 4R nutrient management. *Photo from Gabrielle Schenkels* 

the benefits or nitrogen inhibitors and Environmentally Smart Nitrogen in years such as this, and how to get nitrogen to plants during those key growth stages by altering the sources of nitrogen. Wrapping up with a short business meeting, members made the most of the rare sunny day.

The pasture management session that took place on September 14<sup>th</sup> had similar wonderful company with 10 members and NBDAAF staff present. Jason Wells discussed methods for managing favourable species in pasture and brought along some different species in pots so we could compare the palatability and growth points of different grass species. He also highlighted the <a href="Beef Research Councils Forage U-Pick Tool which">Beef Research Councils Forage U-Pick Tool which</a> can help producers decide on species to introduce based on their pasture needs.

Cedric McLeod gave an update on the Living Labs projects going on around the province, specifically on the Tantramar Marsh pasture project,

which is monitoring carbon sequestration in different pasture practices, like including legume species. He also discussed some of the projects that will be taking place in the Northshore, monitoring effects of variable rate nitrogen fertilizer in dairy forage and blueberry production.

Thank you to all sponsors, speakers, and attendees for all your support and time this summer. I look forward to even more field days and training sessions in the future!



Jason Wells' forage grass display. Photo from Gabrielle Schenkels

## **Efficient Nitrogen Management**

by Jean-Mars Jean-François

On August 16, 2023, the Lionel and Alyre Poitras farm in Saint-André hosted a field day on the nitrogen management in the field. At 1:00 pm, two Speakers (Patrick Toner, Agr. Ret. and Danny Blanchette from Agromart) spoke to the 22 participants for about 3 hours. The Poitras farm grows potatoes in rotation with cover crops and cereals.



Field day on August 16th. Photo from Jean-Mars Jean-François

To begin, Patrick Toner presented the results of some conclusive trials carried out in New Brunswick on the management of nitrogen. Then he elaborated on the importance of nitrogen management. Let's note throughout his presentation, the participants asked interesting questions that facilitated fruitful discussions. Indeed, the government and the fertilizer industry are unanimous in recognizing that a 30% reduction in fertilizers is possible. Note that nitrous oxide N<sub>2</sub>O is the emission of most concern, as it is 300 times worse than CO<sub>2</sub> by weight. Due to the mobility of nitrogen in the soil, the forms of loss (ammonia by volatilization and nitrification by leaching) and its high cost, good use in the soil is particularly recommended. On the other hand, green manures such as alfalfa and red clover can provide the next crop with 50 to 35 kg/N/ha. Also, soil organic matter can provide 25-50 kg/N/ha during the growing season. At the same time, solid manure can provide 50 kg/N/ha at 20 T/ha and liquid manure up to 100 kg/N/ha at 45000 L/ha. The main concern is what to do about too much nitrogen available in the soil when the plant needs it least, to reduce losses. Among the advice given, Patrick Toner emphasized the following actions:

- Banding urea under row > 3.5 inches with band closure inhibits nitrification losses;
- Best management practices to reduce N<sub>2</sub>O emissions during the season consist of split applications of nitrogen, spring ESN products and/or inhibitors. Incorporating manure reduces losses by up to 50%.
- Surface application of urea within 3 days of a 2/5th inch rainfall eliminates volatilization losses.
- Manure composting is a good way to reduce nitrogen losses,
- It is recommended to apply manure in the fall at temperatures below 5 degrees Celcius in order to reduce ammonia losses and retain more nitrogen in the NH<sub>4</sub><sup>+</sup> form subject to less leaching;
- Installing a roof over stored manure can reduce nitrogen losses in the form of NH<sub>3</sub>;
- The addition of manure additives (amino acid for nitrogen) tends to reduce Nitrogen losses as well as reduce feed and water waste content in stored manure (rainwater), as Storage covers reduce N<sub>2</sub>O emissions. Also, adding nitrification inhibitors before application significantly reduces losses.
- N<sub>2</sub>O emissions by 75% as well as decrease NH<sub>3</sub> emissions by 41%, Sokolov et al. 2020;
- Best practices such as a passive aeration windrow results in a 49% reduction in these N<sub>2</sub>O and NH<sub>3</sub>;
- Inhibitory nitrogen promotes the gradual release of nitrogen.

Subsequently, the representative of Agromart reported on a trial conducted with a new type of slow-release nitrogen on the potato. It is still early to present the results. However, the crops did well. It is necessary to wait for the harvests to know the real performance of this product before it is marketed.

In short, the open day was very rewarding in terms of learning about effective nitrogen management in the field. The farmers present expressed their satisfaction during the various exchanges. With the very high cost of nitrogen, good field management will lower crop production costs and reduce nitrogen losses. We would like to thank all those who facilitated the planning, financing and realization of this field day, among others: the Lionel and Alyre Poitras farm, the participants, the Club-Conseils Nord-Ouest, the OFCAF program, FaRM, and New Brunswick Soil and Crop Improvement association.

## Rotational Grazing and Cover Crop Field Day in Carleton County

by Andrew Sytsma

The Carleton region put on a rotational grazing and cover cropping field day this past August. We would like to thank the Budd family for hosting and putting on a great event! NBDAAF Livestock Feed Specialist Jason Wells gave a talk on several different pasture and forage species as well as soil fertility management. Andy Brennan from Hartland Agromart gave a talk on different fertilizer sources that can be used in forage and pasture systems and Dave Walker led a discussion on cover cropping. The Budd's described the operations on their farm, showed the group their rotational grazing system, multi-species forage mixtures they're using for grazing and silage production and then put on demonstrations of their new roller crimper and no-till drill. Thanks to everyone who attended!



No-till seeder demo at Kevin Budd's farm. Photo from Andrew Sytsma



Jason Wells' talk on pasture grass species. *Photo from Andrew Sytsma* 

## Oat and Winter Wheat Cultivar Project Update

This past year, NBSCIA has partnered again with Phytogene Resources from Ottawa in its oat cultivar development work as well as CEROM from Montreal for winter wheat cultivar development. This work is being done in order to develop new cultivars adapted for New Brunswick. The oat plots were heavily affected by the wet summer which severely impacted yield but samples were still harvested in order for the traits of the new oat lines to be analyzed. In the Maritime cultivar performance trials, some of the top yielding lines tested were Phytogene lines that were in NBSCIA's plot work. The winter wheat plots planted in 2022 had good winter survival and minimal lodging. Yield averaged 1.7 tons per acre with some lines reaching over 2 tons per acre. No fusarium was found despite no fungicide applications and no herbicides were needed. The 2023 planting was done on September 29<sup>th</sup> which is late for Centreville area where the plots are located but the plants are off to a good start.

Winter wheat plots. *Photo from Andrew Sytsma* 



Oat tillers from plants this year. *Photo from Andrea Koch* 





**2023** Nov. 28 - Dec. 1

**28 novembre - 1 décembre** Harrison Hot Springs, B.C.

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### <u>CFGA Conference – Nov. 28 – Dec. 1, 2023</u> Early bird registration available until Oct. 30!

Early bird registration is open for the Canadian Forage and Grassland Association (CFGA)'s 14th annual conference taking place in beautiful Harrison Hot Springs, B.C. Nov. 28 through Dec. 1. You have until Oct. 30 to register at a reduced rate for this not-to-bemissed annual event where the forage industry meets to drive development in this critical agricultural sector.

With the theme Forage Resilience in a Changing Landscape – Manage risk. Overcome Challenges. Discover opportunities, this year's event will celebrate the important environmental and economic role forages and grasslands play across the country while delivering the practical, grassroots-based agronomic knowledge the CFGA is known for.

#### Conference Highlights

The CFGA is excited to once again have Dr. Frank Mitloehner from UC Davis open the conference. This year, he will present his keynote address on Wednesday, Nov. 29 when he provides the global picture on how methane from ruminants cycles through carbon in the soil.

#### Other speakers include:

Dan Undersander from the University of Wisconsin speaking about sustainability metrics for forage systems Josh Callen from the Hoyt Report providing a global forage export market update Bart Lardner from the University of Saskatchewan speaking on advancing pasture management to store carbon and reduce methane emissions

Other events and activities taking place at the CFGA 14th Annual Conference are:

Technical workshops on grassland inventories and knowledge tech transfer extension

Welcome reception
Panel discussions

Living Labs showcase and solutions pathway

CFGA Leadership Award reception

Tradeshow

Post-conference tour

Online Learning

#### Register by Oct. 30 and Save \$80

Oct. 30 is the Early Registration deadline for the Canadian Forage and Grassland Association's 14th Annual Conference. Register now for the full conference for just \$420 to save \$80 on your registration fee to join us in Harrison Hot Springs, B.C. for Forage Resilience in a Changing Landscape: Manage risk. Overcome challenges. Discover opportunities.

#### Stay Connected

Visit the CFGA conference website at <a href="www.canadianfga.ca/en/events/conference-2023">www.canadianfga.ca/en/events/conference-2023</a> for more information including registration and accommodation details.

And don't miss out on the latest Conference news by subscribing for updates. Follow us on Facebook at Canadian Forage & Grassland Association and on Twitter @CFGA\_ACPF #CFGA23.



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## **Regional Updates**

## Hot Spot in The North-West: A Bitter Tasting Agricultural Season

by Jean-Mars Jean-François

The northwest region of New Brunswick experienced a very rainy and contrasting summer in terms of peak heat and thermal unit recorded, compared to the year 2022. This situation had a mixed impact on all crops.

In fact, the dry hay harvest was largely penalized. Due to the delay recorded for the first cut of dry hay, the second cut was set aside by some farmers. On the other hand, the yield of grass silage was very good. As for grain, the harvest was very late. This fact affects the quality and the yield. Due to frequent and prolonged rains and especially lodging, vast portions of barley, oat and wheat fields were literally abandoned, as shown in the figure opposite. At the same time, some soybean fields were doomed to rot after flowering. On the other hand, the yield and quality of canola are very good. As for the potatoes currently being harvested, the results are far from acceptable and encouraging. In addition to the low quality due to ground rot, hollow heart, sunburn, the yield remains very average so far. Late varieties do not display large tubers. Moreover, producers anticipate a lot of rot during storage. In the meantime, they try to clean the tubers coated with a layer of sticky mud. This additional work, while not guaranteeing a favorable outcome, will reduce the net profit margin of producers. In view of this gloomy picture, the year 2023 does not leave good memories for the agricultural sector. We must expect some farms already in great difficulty will throw in the towel if this situation persists.

In the meantime, the Northwest Agri-Environmental Club has done its best to support farmers. Alongside basic services, among others, environmental farm plans, nutrient management plans, assistance in research and monitoring of certain projects, the Club held an open day on the efficient management of nitrogen. All in all, a proud candle is sent to the On-Farm Climate Action Fund (OFCAF) program for its financial support and to all those who contributed to the success of this beautiful field day in Saint-André.



Beautiful field of hay. Photo from Jean-Mars Jean-François



Field of abandoned oats. Photo from Jean-Mars Jean-François

## Northshore Regional Update

#### by Gabrielle Schenkels

Summer in the Northshore (although it hardly felt like it at times) has come to a close as we see the finish line of harvest on the horizon. I've had a great first season with the New Brunswick Soil & Crop Improvement Association and look forward to working with all the current and new members in 2024.



Nitrogen Management Field Day. Photo from Gabrielle Schenkels

I was happy to both organize and attend several field days this summer and get to know the Northshore members and industry professionals. The Nitrogen Management Field Day in August, hosted at Grants Brook Farm, brought out more than 30 Northshore producers and professionals for demos from Green

Diamond and presentations from Pat Toner and Daniel Paulin.

Our Pasture Management session in September had another great round of topics

from Jason Wells and Living Lab coordinator Cedric MacLeod. I was happy to represent NBSCIA at the Maritime Forage Field Day in Nappan in August as well. There are several forage variety/companion crop projects entering their final year in 2024 and some exciting ones just starting; John Duynisveld and his team will be measuring the effect of kelp diet supplements on bovine methane emissions (particularly burps – where over 90% of methane is emitted!) starting in November.



Photo from Gabrielle Schenkels

Working hard! Photo from Gabrielle Schenkels

Blueberry production in the region was greatly impacted by the wet conditions during pollination, but thanks to the consistent high temperature in July, the timing for har-

vest worked out right about on average. There were higher instances of leaf disease like leaf spot and rust, as well as berry disease, particularly botrytis, for plants that didn't get preventative treatments. Fruit quality was impacted during harvest due to oversaturated berries, causing splitting or crushing. I am eager to continue scouting and mapping weeds to help producers reduce their costs for spraying, as well as working with producers for upcoming product trials.

I would like to thank all Northshore producers for their membership this year and for their support as I prepare to leave for my work travel term in New Zealand at the end

of October until the end of February. Keep an eye out for a virtual farm tour from me in the new year, and I'll see you at the Annual General Meeting in March!



Photo from Gabrielle Schenkels

## **Carleton Region Happenings**

by Andrew Sytsma

Things have been steady in the Carleton region as a whole. Environmental farm planning and nutrient management planning has been ongoing this year. The weather monitoring project is still in full swing with NBSCIA's weather stations in good shape. As of September 30<sup>th</sup>, corn heat units (CHU) are about 150-200 lower than the same time period last year but rainfall is about 200-250 mm higher this year. For many weather station locations in Carleton County and across the province, the highest August temperature recorded was only 26 °C! Keeping up with the unusual weather, most weather station locations still have not recorded frost as of the first two weeks of October. The weather maps that show CHU, growing degree days (GDD) and rainfall totals can be found on the NBSCIA website at <a href="www.nbscia.ca">www.nbscia.ca</a> under the "weather" tab.



Weather station installation. Photo from Gabrielle Schenkels

## What's New in The Central Region

by Andrea Koch

As harvest is well underway in the Fredericton region, I'd like to commend all the farmers who worked hard to make the best of this abnormal growing season. Reports have been positive to end off the month of October with many farmers getting the chance these last couple weeks to get in the last of the grass and corn silage needed for their livestock. Recently, early varieties of soybeans have started to be harvested and the grain corn is starting to dry down to be harvested in the next few weeks if weather permits.

The summer was busy with field days organized by NBSCIA, other agricultural producers and stakeholders. I was able to arrange two field days this summer where local farmers were able to come out to learn and ask questions on the topics of nitrogen management, cover cropping and rotational grazing. I am grateful for all those who took the time to come out to those sessions.

I enjoyed getting out of the office to work with several farmers these past few months to learn about their farms and to help with any questions or goals they were trying to achieve. I have also had the chance to learn from other local professionals in the areas of apple production and integrated pest management, which has allowed me to expand my knowledge of the resources available to help farmers with their production needs.

This fall, I had the pleasure of touring four farms across New Brunswick with the Farm of the Year judges to check out how each of them are working to improve soil and environmental sustainability. Each of the farms visited are amazing candidates for the Farm of The Year award and it will be difficult for the judges to select a winner. You will be able to learn more about these farms at the upcoming AGM in March, 2024.

Overall, I have had a good first summer with Soil and Crop and I hope to continue to learn and be able to provide resources and services to my members this fall and into the coming winter.



Dana Chase's beef cattle grazing on a multi-species cover crop. *Photo from Andrea Koch* 

## **Variety of Events in Kings County**

by Joseph Graham

Kings county has once again kept busy with various events for all NBSCIA members. Kings hosted three sessions to assist and train farmers on the main components of the On Farm Climate Action Fund (OFCAF). The first two sessions were held in Knightville at Frank and Alex Jopp's. The nitrogen management session on August 8<sup>th</sup>, we were joined by Pat Toner to discuss soil health and other ways we can benefit from good nitrogen management. During this session we also got to see a demo of a new vertical beater manure spreader.

Following this event, Kings hosted a rotational grazing session on August 11th at the Forage Plots; this session was led by Jason Wells who discussed the importance of forage varieties as we toured the grass and festulolium trials. The rain held off long enough for those attending to also tour the corn/alfalfa companion trial that was new this year. Unfortunately, even with tile drainage this trial site struggled to handle all the rainfall. This was a reoccurring theme during the summer months here in Kings County.

On August 15<sup>th</sup> Kings Soil and Crop Improvement association hosted our annual field day. This year Scott and Malcolm MacDonald hosted a forage day; however, fields were still far to wet to get any equipment moving. Despite this we had a great turnout with Hall Bros, Green Diamond, County Tractor, and Millstream Agriculture all bringing equipment and leading a discussion on each piece. We thank all the dealers once again for supporting our events. We also must thank the local church ACW group of St Simon and St Jude. They did a fine job of providing a grab and go lunch for all those who attended and more.

Our final August event was a cover cropping training session on August 31<sup>st</sup> hosted in Foxhill at Dan and Deslie Kalverboer's farm. This event was led by Dave Walker as we toured corn fields and discussed the importance of a proper crop rotations. Alongside this we also discussed how we can get the most value from cover cropping. We thank all the farms who allowed us to host at their farms for our events. It is always more engaging and informative to see the practices in action. Thank you all.



Cover cropping field day in Foxhill. *Photo from Beverly Booth* 

As we moved into fall, NBSCIA was invited to attend the Kings County Agricultural Fair. NBSCIA set up a booth to engage with families and producers. The Agricultural Fair was a very good event and we enjoyed being present in the agricultural community. After this fair marked the beginning of soil sampling season for soil and crop. Finally, by the end of September we had a week of dry weather which allowed many producers the chance to bail silage or dry hay. I hope everyone's cropping season was successful.

One last event of note was the Christmas Tree Growers Atlantic meeting. During the event on the 23<sup>rd</sup> of September, tree growers expressed their concern with the lack of frost and increasing mild fall weather before harvest, and here we are on Oct 16<sup>th</sup> yet to see a frost in the region. Difficult season so far for many producers across agriculture.

Going forward, look for information on our Annual General Meeting dates as we will be working towards planning our local and provincial events for this winter.

## Welcoming Beverly as Coordinator for the Moncton-Chignecto Region

by Beverly Booth

Hello everyone! Many of you know me by now, I am the new Agro-Environmental coordinator for the Moncton-Chignecto region. I recently completed my bachelor's degree from Dalhousie University Faculty of Agriculture with a

major in animal science and a minor in plant science. I live in Jolicure, NB and help on my family's 200 head commercial cow calf operation. We also do some backgrounding and grow our own barley and oat crops.

Growing up I was heavily involved in 4-H and competed in many provincial and national competitions through my fourteen years with this program. The 4-H program has led me to other opportunities such as being selected to attend the Royal Agricultural Winter Fair as well as being the maritime director for the Canadian Junior Angus Association.

While working as a summer forage agronomy research assistant for Agriculture and Agri-Food Canada, I successfully applied my field care skills and worked closely with the samples being studied. I participated in completing assigned field experiments and collected and recorded data from nineteen project trials. I performed tasks such as mowing, planting, raking, topdressing, overseeding, fertilization, soil sampling, harvesting, as well as spray applications. This experience gave me the opportunity to work closely alongside a team of research agronomists which enabled me to understand the importance of proper practices and techniques in the field as well as in the lab.

I started my position with NBSCIA on August 14<sup>th</sup>, 2023 and jumped in where Zoshia left off. I have been busy aiding farmers with nutrient management planning throughout the summer and fall. Nutrient management planning and providing fertility recommendations has been the bulk of my work load. I have been fortunate to meet with many of the producers in my area from one end of my region to the other. I was not able to host any field days this summer as I was just getting into the swing of things; however, I am hoping to host two or three next year and already have some ideas flowing. I am honored to begin this new journey with the NBSCIA and I look forward to working with you to enhance the soil and crop sustainability in New Brunswick.



The new face in Moncton/Chignecto. *Photo from Beverly Booth* 







## **Member Service Description**

#### Geomatic Packages

Includes a basic set of farm maps. These maps are georeferenced and illustrate watercourses and other buffers

Custom mapping packages include Soil Status maps, Target Balance Maps, Variable Rate Application Maps

#### **GPS Work**

Perimeter mapping, area determination, crop yields

#### Soil Sampling Package

Includes sampling, sample preparation, completion of soil form and submission of samples, and interpretation of results as well as recommendations (does not include cost of soil analysis)

#### **Environmental Farm Plan**

Can create field and farm maps, emergency response plans, as part of your environmental farm plan

#### **Equipment Calibration**

Calibrations on sprayers, seeders and manure spreaders

#### **Emergency Response Plan**

A written emergency response plan for compliance with regulatory bodies

#### **Nutrient Management Plan**

Whole farm nutrient management plans, including plans compliant with the Livestock Operations Act

#### **Intensive Crop Management Planning**

Integrated Pest Management
Scouting fields for insect pests and weeds
Plant population counts and plant emergence counts

#### Canada GAP Pre-Audit Assessment

**Cost of Production Analysis** 

**Crop Monitoring** 

**Production Management** 

## **Contact Us**

If you are in need of any services, or have any questions, please contact your local Coordinator.

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## Rainmakers



www.corteva.ca











https://kubota.ca/



www.fcc-fac.ca



Canadian Forage & Grassland Association
Association Canadienne pour les Plantes Fourragères

https://www.canadianfga.ca/en/



Agriculture and Agri-Food Canada

Agriculture et Agroalimentaire Canada



## **Barn Raisers**





www.cavagri.com



#### **Harvesters**







https://www.jdirving.com/en/





www.fundy-ag.com





https://www.sussexco-op.ca/







## **Seed Sowers**

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www.nbmilk.org

