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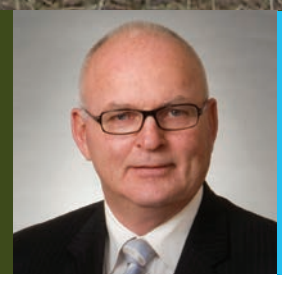
Agriview

Last year for Growing Forward 2

PAGE 8

Government of Saskatchewan

Minister's Message



Lyle Stewart

Welcome to the March edition of Agriview.

Spring is just around the corner – a busy time for everyone in our industry. Agriculture policy frameworks may not be top of mind when you are in the middle of calving or planning for this year's crop. However, with Growing Forward 2 set to expire one year from now, our government is actively working to ensure the interests of Saskatchewan's agriculture sector are represented in the next suite of programs.

For 15 years, federal-provincial-territorial governments have relied on agriculture policy frameworks to ensure a collaborative approach that encourages investment, adaptation and sustainable growth in the sector. The Next Policy Framework (NPF) will take us from 2018 to 2023, and it is important Saskatchewan's priorities are represented.

Our government is actively working to ensure the interests of Saskatchewan's agriculture sector are represented.

As in past agreements, the NPF will include business risk management programs, such as Crop Insurance, and funding for strategic initiatives, such as programs targeted at further developing our markets. In this edition of Agriview, you can get an update on some of our Ministry's consultation activities, which have included an online survey to gather input on priorities for strategic initiatives. You can also review some of what we've been able to achieve with GF2, including investments into the International Trade Centre at Evraz Place in Regina, the Food Centre in Saskatoon and the Livestock and Forage Centre of Excellence under construction at Clavet.

March is also a good time to connect with your local crop insurance office. I encourage you to take some time to talk to the experienced staff about the 2017 Crop Insurance Program, and review your options before the March 31 deadline.

I wish you a safe and productive spring. ■

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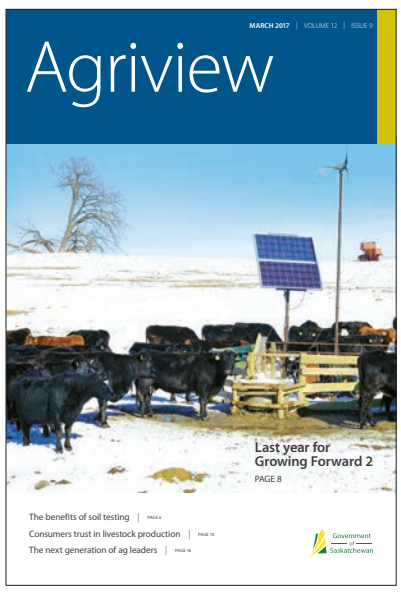

Cover: Solar-powered watering system installed with the financial help of Growing Forward 2. Access programs that can assist you in your operation before application deadlines arrive. Consultations are underway for the next agriculture policy framework. Turn to page 8 for more Growing Forward 2 information.

AGRIVIEW is published by the Communications Branch of Saskatchewan Agriculture for Saskatchewan farmers, ranchers and farm and food organizations. For more information, call 306-787-5160 or email agriview@gov.sk.ca. To view this publication online, visit www.saskatchewan.ca/agriview.

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PROGRAMS & SERVICES

Government of Saskatchewan

Yield not the only consideration when selecting crop cultivars

Cory Jacob, AAg
Regional Crops Specialist, Watrous
Regional Services Branch

It is important that producers choose the appropriate crop variety for their specific farm operation. A variety should be selected based on the location and production practices of each farm. Selecting a crop variety based only on yield is not always the best idea as there are many other important variety characteristics to consider and one that will be discussed is competitiveness with weeds.

Weeds are an issue on every farm in this province, but competitiveness with weeds is often overlooked when selecting crop varieties. Height is the plant trait most associated with a competitive crop variety. Tall varieties are able to intercept more sunlight for photosynthesis, which leaves less sunlight for the weeds. This results in a greater suppression of weed growth and an increased crop tolerance to the weed competition, often resulting in less yield loss due to weed competition. It is difficult to put a number on the yield loss, as it depends on a number of factors, including crop type, weed species, crop and weed plant populations, nutrient and moisture availability and environmental conditions. Plant competition is often overlooked, but be assured that wherever weeds are growing in a crop, a struggle is taking place between them and the crop for nutrients, water and sunlight.

One possible tradeoff to growing a tall crop variety is lodging. Producers needs to do their due diligence and check in the *2017 Varieties of Grain Crops* on the lodging resistance of the crop variety they would like to grow.

The *2017 Varieties of Grain Crops* is a very useful variety selection tool, as it provides information about crop variety and characteristics such as yield, maturity, disease resistance, seed size and lodging. In contrast to the *2017 SaskSeed Guide*, it includes information on variety availability among pedigreed seed growers in the province. The *2017 Varieties of Grain Crops* information is organized based on the four main production areas in Saskatchewan as classified by their agro-climatic conditions, similar to Saskatchewan's soil zones. It is also a useful tool for comparing new varieties to old ones. Yield predictions will be based on a percentage of a common check variety for each crop, for example Carberry is the check variety for wheat, CDC Bethune for flax and CDC Amarillo for field pea. ■

FOR MORE INFO

Contact a Regional Crops Specialist at a nearby Saskatchewan Agriculture Regional Office; or
Call the Agriculture Knowledge Centre at 1-866-457-2377.

Herbicide layering prevents the development of herbicide resistance

Clark Brenzil, PAg
Provincial Specialist, Weed Control
Crops and Irrigation Branch

Research at the University of Saskatchewan has shown that producers can increase yields and greatly reduce the risk of developing herbicide-resistant weeds by using herbicides with multiple modes of action (i.e. herbicide groups) within a single crop year. The technique, often referred to as herbicide layering, includes the use of both soil-applied and foliar herbicides to manage weeds, with large overlaps in the species controlled.

Herbicide resistance can evolve from a single mutant resistant weed to the entire field in a short timeframe. This single plant may be the result of natural genetic variation within the existing weed population or it could have been introduced from another field via seeding or harvest equipment. Annual weeds that occur at high densities, outcross easily and produce lots of seed, pose the greatest risk of developing resistance. The herbicide resistance section of the *Guide to Crop Protection* has a list of weeds that are at high risk of developing resistance.

Mutations occur in the natural population at rates ranging from one in one hundred thousand to one in one hundred million. This seems like a very small number until you do some simple math on field populations and find that a relatively moderate weed population of 50 plants per square metre (before spraying) amounts to 80,000,000 plants per quarter section or one billion individual weeds on a 5,000-acre farm. For any specific weed/herbicide group combination, there could be between 10 and 10,000 resistant weeds on that farm. Each tenfold increase in weed numbers results in a tenfold increase in the risk of resistance. Therefore, being able to reduce weed populations with agronomic practices (e.g. increased seeding rates, competitive crops, targeted fertilizer placement) reduces overall risk of resistance as well.

Using multiple herbicide groups per season improves your odds of avoiding resistance. By using two herbicides from different groups that each have a 1:1,000,000 risk of mutation to manage weeds with proven resistance potential, the overall risk of resistance drops to 1:1,000,000,000,000. Adding a third herbicide from another different group adds six more zeros to the risk of mutation, and so on. This only works proactively, however, and if resistance is already present in the field, a herbicide selected from that group(s) will not count toward the risk reduction for that weed.

The *2017 Guide to Crop Protection* will be available in early March from Saskatchewan Agriculture Regional Offices, agricultural supply outlets and online at **www.saskatchewan.ca**. ■

FOR MORE INFO

Contact a Regional Crops Specialist at a nearby Saskatchewan Agriculture Regional Office; or
Call the Agriculture Knowledge Centre at 1-866-457-2377.

Efficient use of fertilizer can save you money

Patrick Mooleki, PhD, PAg
Soil/Nutrient Management Specialist
Agriculture Knowledge Centre, Regional Services Branch

Fertilizer constitutes a significant expense in crop production. Through efficient application and management of fertilizers, producers can reduce the amount they apply, save money, enhance crop production and quality, and minimize nutrient losses, all while protecting the environment from nutrient contamination.

Best nutrient management practices are encapsulated in the fertilizer industry's 4R stewardship concept of applying the Right fertilizers, at the Right rate, at the Right time and in the Right place.

To do this, the producer needs to know the nutrient status of the soil. Soil sampling and analysis is the first step. Based on yield goals, the producer needs to know the crop's nutrient requirements. Once that is established, the producer can determine the amount and type of fertilizer needed, and when and how to apply it.

The four major nutrients are nitrogen, phosphorus, potassium and sulphur. Phosphorus and potassium are not very mobile in the soil, so they need to be banded at the time of, or just before, seeding, separate from, but still close to, the seed. Nitrogen and sulphur, however, are soluble and mobile in the soil, and can be applied prior to, at the time of or after seeding. If the fertilizer is seed-placed, follow guidelines for maximum safe rates. Using soil and plant tissue analysis, determine if micronutrients are needed and apply them if necessary.

Of all the nutrients, nitrogen is the most susceptible to various forms of loss such as volatilization, leaching, denitrification and run-off. The objective in fertilizer management is to protect nitrogen from loss and to protect the seed from toxic and salt effects of N fertilizer. There are various techniques and products to control the release of nitrogen from nitrogen fertilizers. The two most commonly used products in Saskatchewan are Agrotain and ESN (Environmentally Smart Nitrogen), however other products are also available on the market. The economic advantage offered by these different products depends on how well they protect against nitrogen losses under prevailing environmental and soil conditions. For example, volatilization may not be an issue if sufficient rainfall is received within a short time after a broadcast application.

Using these simple agronomic steps will go a long way to improving yields and quality, while saving on fertilizer costs. ■

FOR MORE INFO

Contact the Agriculture Knowledge Centre at 1-866-457-2377.

Phosphorus—the hidden hunger

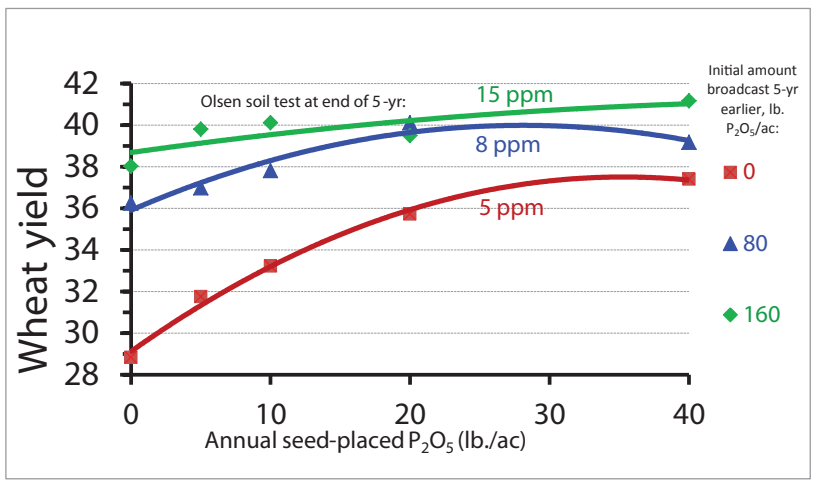
Patrick Mooleki, PhD, PAg
Soil/Nutrient Management Specialist
Agriculture Knowledge Centre, Regional Services Branch

Phosphorus (P) and nitrogen (N) are the two most limiting nutrients in Saskatchewan soils. However, most producers pay more attention to nitrogen than to phosphorus, resulting in poor yields due to an imbalance in the supply of nutrients, with phosphorus likely being the limiting factor.

Depending on the crop type, uptake of phosphorus ranges from eight to 30 lb./ac. Failure to supply the crop with sufficient phosphorus leads to a reduction in yield and quality. In field crops, phosphorus deficiency symptoms are not as obvious as those of nitrogen and sulphur, but include stunted growth, dead areas on leaf tips or stems, red to purple colour on young leaves, late flowering and maturity, and poor yield. Quite often, these symptoms do not show and yet yields are severely reduced, hence the term "hidden hunger."

Saskatchewan soils are inherently low in available phosphorus, with 85 per cent of Saskatchewan cropland needing phosphorus fertilizer. Annual phosphorus application is required to meet crop demand, and any phosphorus that is not used by the crop helps build up phosphorus levels in the soil. Producers who reduce or stop phosphorus application may see no impact for a few years, but then yields and quality may begin to decline.

Phosphorus is not very mobile in the soil and, therefore, should be placed with or near the seed at the time of seeding. This is particularly important with cool soil to enhance seedling and root development, producing the so-called "pop-up-effect." Over-applying phosphorus close to the seed, can result in damage to the seed and seedlings, though, so it is important to always follow the guidelines for safe seed-placed phosphorus. Other



Wheat yield response to annual seed-placed phosphorus and soil phosphorus levels (ppm) over five years after 0,80 and 160 lb. P_2O_5/ac. were broadcast on plots near Saskatoon.

application methods, such as broadcasting prior to or after seeding, may not be as effective and may require large amounts of fertilizer to produce similar results in the crop. Broadcasting and incorporating large amounts of phosphorus fertilizer when fertilizer prices are low can be a long-term strategy to build available phosphorus levels in the soil (see chart).

Do not ignore phosphorus fertilizer in your plans. Conduct a soil test to determine how much phosphorus—and other nutrients—are needed for a realistic yield goal. ■

FOR MORE INFO

Call the Agriculture Knowledge Centre at 1-866-457-2377.

Soil testing—always the right decision

Ken Panchuk, PAg
Provincial Specialist, Soils
Crops and Irrigation Branch

Soil testing is the best way to determine which nutrients are deficient when it comes to balanced plant nutrition to optimize crop yield and quality. Spring soil testing usually starts as soon as some of the frost is out of the ground. Conducting soil tests on a regular basis allows for the monitoring of trends in soil nutrient levels and soil characteristics over time. This is especially important after a large crop such as last year's. The soil's nutrient bank has likely been drawn down again as a large amount of nutrients were exported in the crop or tied up in the crop residue.

Soil test laboratories measure the amount of plant-available nutrients and—if they have root simulator technology—determine a nutrient supply rate for each nutrient. The labs take the information from the soil analysis and make nutrient recommendations based on a selected crop, yield target, soil characteristics, estimated plant-available water, geographic location and cropping history. All of this information is factored into making the nutrient recommendations.

When selecting a soil test lab, look for the level and speed of service and convenience. Some labs offer full service including field sampling, interpreting the analysis and consultations with recommendations for each field. The labs gear up for rapid turnaround times because timelines are very short during the spring rush.

Accurate recommendations require accurate soil sampling. Getting a truly representative sample for each field should be the main focus in soil sampling. Commonly, samples are taken in 20 or more random locations across the field (random sampling), or from a smaller area of the field

considered typical (benchmark sampling). Geo-referencing the sampling locations is commonly used today and is especially important in precision agriculture systems.

Determining which nutrients are deficient and the supplementation required to correct the deficiency in balance with the other nutrients is an important step in the industry-led 4R nutrient stewardship program: "The Right source of nutrient, applied at the Right rate determined by soil testing, at the Right time and in the Right placement." Soil testing also guides nutrient management program development to meet long-term crop needs while protecting the environment. ■

FOR MORE INFO

Contact a Regional Crops Specialist at a nearby Saskatchewan Agriculture Regional Office; or
Call the Agriculture Knowledge Centre at 1-866-457-2377.

2016 New Crop Missions: Building and strengthening new international relationships

Doris Morrow
Manager, Market Development Unit
Policy Branch

Canada's international agricultural customers have heard that 2016 was a tough growing season for wheat and durum. They have questions and concerns about the quality of Canadian wheat and durum exports. Cereals Canada, the Canadian International Grain Institute (Cigi) and the Canadian Grain Commission (CGC) led a crops mission to our major wheat and durum customers to answer their questions and assure them that Canada remains a reliable supplier. The three organizations brought a team of experts representing the entire value chain—including producers and exporters—to maintain and protect the country's export markets through presentations, conversations and dialogue.

The team toured 17 countries in the fall of 2016, travelling through Asia, Latin America and Europe, as well as north and west Africa. The approach was to provide customers with updates from experts along the Canadian value chain. The mission provided the opportunity to share the whole story about the crop quality that would be available for their import needs.

Canada conducts these missions on a regular basis, and producer participation is critical to their success. Lane Stockbrugger, a Saskatchewan producer, joined the team on one 15-day leg of the journey through Algeria, Morocco, Italy and Great Britain.

"Participating in a crop mission with the entire value chain reinforced the work organizations like Cereals Canada, CIGI and the Canadian Grain Commission are doing," he explained. "As a farmer, being able to answer questions, providing these very important Canadian export markets with the Western Canadian/Saskatchewan farmer's perspective is invaluable. As I reflect on the size of these markets, and what's at stake in an increasingly fierce worldwide competitive landscape, I'd encourage all farmers to support these crop missions."

As the voice of the Western Canadian producer, Stockbrugger spoke about producers' independent approach to running their businesses and how they make decisions in the interests of the family business, both in the short and long term. He spoke about how technological advancements help Canadian farmers be as productive as possible, while ensuring that they grow crops sustainably in a manner that protects the land, air and water for the next generation.

"These discussions help build new business relationships and strengthen existing ones," he said, "which, frankly, is ever important to this Canadian farmer if we intend to maintain and grow our position in these markets." ■

FOR MORE INFO

Visit the Cereals Canada website at www.cerealscanada.ca.

Emergence timing and management of cleavers in Saskatchewan canola crops

Cleavers is a common weed that is flourishing in a number of Western Canadian crops. It is the most competitive broad-leaved weed in winter cereals and can reduce canola yields significantly if it emerges within a week or two of the crop. It is a prolific seed producer—each plant produces an average of 300-400 seeds—and even a low-level infestation can dramatically lower the quality of canola oil. Compounding the problem, its seeds are so similar to canola that they cannot be mechanically separated, which causes downgrading and marketing problems. In addition to these issues, cleavers have weak, climbing stems that cause crop lodging and harvesting problems.

Given the challenge cleavers presents to the canola sector, it is vital to understand why they are successful and how to better control them. Proper identification and management can lead to improved cleavers control in canola. With the financial assistance of the Saskatchewan Agriculture Development Fund (ADF), the Western Grains Research Foundation and SaskCanola, a research team from the University of Saskatchewan's Department of Plant Sciences set out to aid growers by:

- Characterizing the genetic and emergence characteristics of cleavers populations in Western Canada;
- Evaluating the response of cleavers to herbicides new to canola production, such as quinclorac (Clever, MasterLine Quinclorac) and clomazone (Command); and
- Comparing the response of cleavers populations from across the Prairies to glufosinate-ammonium, glyphosate and quinclorac to assess whether differences among populations existed.

Three members of the bedstraw family, *Galium. aparine* (cleavers), *Galium. spurium* (false cleavers) and *Galium. boreale* (northern bedstraw), are present on the Canadian prairies. *G. aparine* and *G. boreale* are native to North America and *G. spurium* was introduced from Europe. Field surveys have found cleavers to be increasing and it was assumed that these populations were a complex of the two species *G. aparine* and *G. spurium*. *G. aparine* and *G. spurium* are physically indistinguishable, which makes it difficult for agrologists to recommend species-appropriate control measures. Chromosome counts are currently the most effective way to tell the species apart, but this process is very tedious and time-consuming.

Thanks to advancements in biotechnology, the research team used variation in a single gene to develop a molecular marker to distinguish among the three species. The marker could potentially be used in future projects, such as weed surveys.

Using this marker, the researchers determined that all the cleavers samples that had been collected for this project from nine locations across the Prairies were *G. spurium*. This was surprising, since previous research had suggested cleavers populations were a complex of both *G. aparine* and *G. spurium*.

The team found that emergence timing of cleavers varied among populations in both the spring and fall, and that these variations did not correspond with geographical location. This suggests that growers will have to pay close attention to emergence timing in their fields in order to ensure they do not miss the small window for control. More importantly, the project showed that substantial portions of cleavers populations emerge in the fall and may potentially overwinter into spring. Overwintering makes cleavers very difficult to control in spring, so researchers recommend that producers make post-harvest fall control of cleavers a priority.

Herbicide effectiveness field tests were conducted in 2013 and 2014 at the Agriculture and Agri-Food Canada Research Station at Scott and the Saskatchewan Pulse Growers research site near Saskatoon. A third site near Rosthern was added in 2014. The Clearfield, Liberty-Link and Roundup-Ready systems were compared to each other and to untreated controls.

Thanks to advancements in biotechnology, researchers used variation in a single gene to develop a molecular marker to distinguish among the three species of bedstraw. The marker could potentially be used in future projects, such as weed surveys.

Taken together, the test results revealed that the addition of clomazone, applied pre-emergence, and quinclorac, applied post-emergence, to canola significantly improved cleavers control in canola over the untreated control, although the level of control with clomazone was not commercially acceptable on its own. Applying clomazone in the spring reduced the size and stage of cleavers found in-crop. The significant growth reduction caused by clomazone allowed the in-crop herbicides, such as glyphosate, Liberty and Odyssey, to more effectively control cleavers species. Using clomazone and quinclorac in conjunction with existing herbicides reduced cleavers biomass and seed contamination and increased canola yield. Quinclorac, which can be mixed with any of the in-crop herbicides, lowers the risk of developing resistance to these herbicides by adding a different mode of action to in-crop applications. Including clomazone and quinclorac in production practices will have long-term control benefits in Western Canada.

Both of these products are registered in Canada for use with canola. Unfortunately, market access in importing countries may be restricted in some cases, so producers should check with potential grain buyers to ensure the herbicides' acceptability before using them.

While producers will benefit from improved understanding of cleavers management, this project also contributed to the training of two Masters-level students. Currently, one is working for the canola industry and the second is working for a local research organization.

The Agriculture Development Fund provides funding to institutions, companies and industry organizations to help them carry out research, development and value-added activities in the agriculture and agri-food sector. The results produce new knowledge, information and choices in technologies, techniques and varieties for farmers, ranchers, processors and input suppliers, to improve the competitiveness of Saskatchewan's agricultural sector.

In 2017, the Saskatchewan Ministry of Agriculture and Agriculture and Agri-Food Canada committed $11.1 million in new funding for 70 ADF research projects through Growing Forward 2, a federal-provincial-territorial initiative. ■

FOR MORE INFO

Visit Saskatchewan.ca and search for ADF; select the ADF Knowledge Creation link and enter number 20120028 into the search function.

Growing Forward 2 – supporting Saskatchewan agriculture

Kate Marchand, BA
Program Analyst
Policy Branch

Growing Forward 2 (GF2) has provided significant support for the agricultural industry in Saskatchewan, investing $284.8 million in strategic initiatives since 2013. Over the course of the agreement, GF2 will see $125 million more flow into strategic initiatives than under the previous policy framework. This helps to support increased research funding, new capital investments, enhanced investments in plant and animal disease monitoring and control, and additional support for the value-added and irrigation sectors.

GF2 is the current federal-provincial-territorial policy framework for Canada's agricultural and agri-food sectors. In effect from 2013-2018, GF2 programming is divided into Business Risk Management (BRM) and strategic initiatives and is cost-shared on a 60:40 basis between the federal and provincial governments.

Business Risk Management

There are a number of programs available to help producers manage risk, including Crop Insurance, AgriStability, AgriInvest, AgriRecovery, Western Livestock Price Insurance and Wildlife Damage Compensation. Crop Insurance assists producers who experience loss in quality or yield due to natural hazards. AgriStability supports producers who experience major losses in income. AgriInvest is an individual account for producers, supported by federal and provincial governments, which can be used either to provide financial support in the face of a decline in income or to make investments in the farm operation. AgriRecovery is a framework put in place to cover the unexpected costs that producers encounter from disasters, such as flooding, disease or pests, that are not covered by other programs. Western Livestock Price Insurance helps livestock producers withstand market instability and protects them against unforeseen price declines through an insurance policy. The Wildlife Damage Compensation program is available to all Saskatchewan producers who sustain crop or livestock losses due to wildlife.

Strategic Initiatives

Support for strategic initiatives under GF2 is targeted at innovation, competitiveness and market development, and adaptability and industry capacity. To support innovation, Saskatchewan offers the Agriculture Demonstration of Practices and Technologies (ADOPT) Program, the Agriculture-Applied Research Management (Agri-ARM) Program, the Agriculture Development Fund (ADF) and the Saskatchewan Research Program (SRP), as well as technology transfer and communication, and infrastructure support. These programs are intended to improve the diversification and profitability of the Saskatchewan agricultural industry, as well as promote the implementation of new technologies.

GF2 Success stories

The support of GF2's Agriculture Development Fund helped VIDO-InterVac develop a vaccine, which is currently being field-tested, to protect Canadian swine from the Porcine Epidemic Diarrhea virus (PEDv). PEDv causes severe dehydration and diarrhea that is fatal in young pigs. It has killed over eight million pigs in North America, costing producers approximately $400 million. This development has been very important for all Canadian swine producers, not just those in Saskatchewan.

GF2 support also enabled the SRP to lead an international team of researchers who sequenced 90 per cent of the exceedingly complicated genome used for bread wheat. The Saskatchewan Food Centre and Ag-West BIO have developed new techniques for using oilseeds and pulses in food products, thanks again to the ADF's GF2 funding.

In the category of competitiveness and market development, Saskatchewan delivers a wide range of programming for farm business management, trade and market development, value-added business development and rural water infrastructure. These programs support Saskatchewan producers through business training, workshops and certificate and mentorship programs. They also support market development opportunities for Saskatchewan agriculture. Financial support is also provided to agribusinesses in order to meet new industry regulations or to improve productivity.

Saskatchewan provides a number of programs on food safety, plant and animal health, environment and, unique to Saskatchewan, agricultural awareness. The objective of these programs is to help industry and agribusinesses train employees, implement new technologies, prevent the spread of disease and build consumer awareness of agricultural practices.

Capital investments contribute to the long-term sustainability of industry by providing the space and means to complete research and market events. There have been a number of capital investments made through GF2 to support both the Canadian and Saskatchewan agricultural industries. For example, Evraz Place received $22 million to replace multiple livestock barns with a single 150,000-square-foot International Trade Centre (ITC), which is now the new home of Canadian Western Agribition and the Canada Farm Progress Show. The Saskatchewan Food Industry Development Centre received funds to expand its facilities to better serve the province's growing food ingredient processing sector. Lastly, the Livestock and Forage Centre for Excellence at the University of Saskatoon received financial support to increase its capacity for research, training and knowledge transfer. ■

FOR MORE INFO Visit www.saskatchewan.ca and search for "Growing Forward 2."

Online consultations for agriculture programs

Nancy Carlson, MPA
Policy Analyst
Policy Branch

The work continues to develop the federal-provincial agricultural policy framework that will follow Growing Forward 2 (GF2) when it expires in March 2018. To ensure that the Next Policy Framework (NPF) focuses on the right programs to keep Saskatchewan agriculture strong and growing, the government is taking steps to consult with stakeholders.

To gather feedback from a broader public audience, Saskatchewan Agriculture conducted an online survey from November 14, 2016 to January 31, 2017. The purpose of the survey was to set priorities for the NPF. The survey included questions on the overarching opportunities and risks for the sector, as well as the program activities that could support the opportunities and lessen the risks.

The majority of respondents to the survey were producers (75 per cent). Responses were also balanced across the crops and livestock sectors relative to the size of each. Respondents to the survey also included agribusinesses, processors, researchers, consumers, municipal government and environmental organizations.

Six priorities for the NPF were announced in summer 2016 to guide the development of the framework. The survey asked respondents which three of these six would have the greatest impact on the agricultural industry. An overwhelming majority (76 per cent) indicated that Markets and Trade will have a significant impact. Each of the other five areas (Risk Management, Science, Research and Innovation, Environmental Sustainability and Climate Change, Value-Added Agriculture and Agri-Food Processing, and Public Trust) received a similar number of votes.

The survey then asked respondents to indicate which of the items listed under each of the six priorities should be prioritized for government funding. All of the options presented received votes or were rated against each other, and additional feedback was received. Trade advocacy/market access, disease surveillance and control, farm business planning, basic and applied research, and agriculture awareness events received a substantial amount of support.

Data collected from this survey are valuable in developing the program suite for the NPF. Consultations with industry will continue as GF2 comes to a close. ■

FOR MORE INFO

Email growingforward2@gov.sk.ca; or
Visit Saskatchewan.ca and search for "Growing Forward 2."

Business risk management programs under review in preparation for Next Policy Framework

Omotooke Odeniyi, MA
Policy Analyst, Economics and Farm Income Policy
Policy Branch

Under Growing Forward 2 (GF2) and in preparation for the Next Policy Framework (NPF), all programs in the current Business Risk Management (BRM) suite are being reviewed. This midterm review process included a national BRM survey conducted last March. Questions on the core BRM programs—AgriStability, Crop Insurance (AgriInsurance) and AgriInvest, and Advance Payments Program (APP)—were included in the survey.

Feedback obtained through the national BRM survey as well as industry association surveys, industry reports and industry consultations will be taken into consideration for the Next Policy Framework. The feedback suggests that producers see the value of AgriInvest and Crop Insurance. AgriStability on the other hand, is a more complex program and this leads to producer frustrations. This can include difficulty understanding how the program works and lack of predictability: Program payments. Some of the decline in AgriStability participation may be attributed to these factors as well as the considerable expense incurred by some producers to have their forms prepared.

Despite these shortcomings, the programs still play important roles in managing risk, as shown by the fact that the federal and Saskatchewan governments invested an average of $540 million per year in BRM programs in Saskatchewan in 2013 and '14. Strong agricultural markets, growing producer productivity and an effective suite of BRM programs is the recipe that has led to steadily rising farm incomes and a growing provincial agriculture sector over the past decade.

The Saskatchewan Ministry of Agriculture continues to work with Saskatchewan Crop Insurance Corporation (SCIC), the federal government and other stakeholders to improve the entire suite of BRM programs. More producer and stakeholder consultations are planned to further guide preparations for the Next Policy Framework. The international accounting firm Price Waterhouse Coopers (PwC) is completing a study on the Western Livestock Price Insurance Program (WLPIP) to determine the possibility of adding WLPIP to the core BRM programs in the Next Policy Framework.

The Ministry has not focused on BRM programs alone; stakeholder consultations were held in June to discuss both BRM and strategic initiative programs and an online consultation on non-BRM programs was conducted this winter. The feedback from these consultations is also being used to guide decisions and negotiations on the Next Policy Framework. ■

FOR MORE INFO

Visit www.saskatchewan.ca/government/public-consultations.

Safeguarding the environment is the key to retaining consumers' trust in livestock production

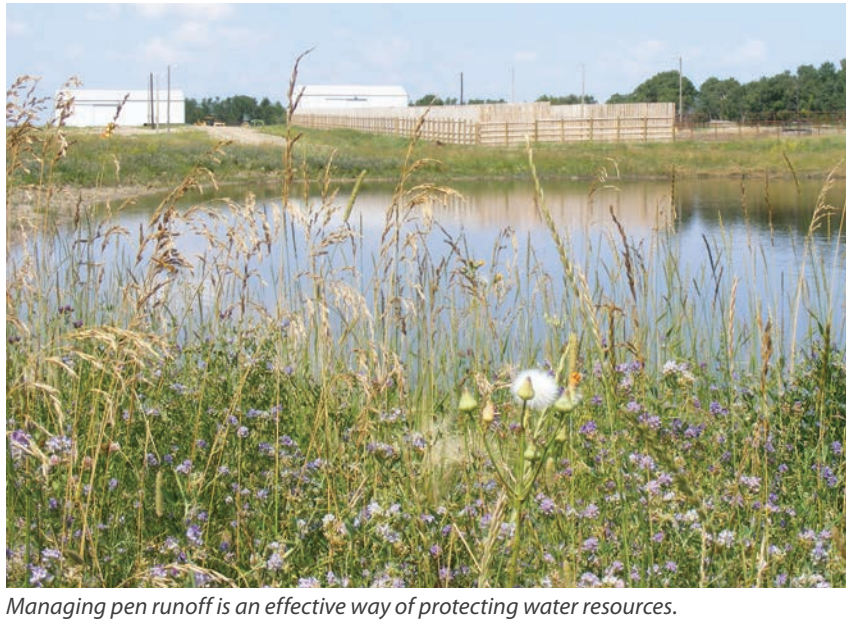
Sheldon Diduck, PEng
Regional Engineer, Yorkton
Livestock Branch

People have been ranching in Saskatchewan since before it became a province in 1905. Keeping the sector sustainable and viable for another 100 years requires that ranchers follow good animal and environmental practices to retain the trust of future generations and consumers.

How can you, as a rancher, ensure you have the public's trust and social licence? One way is by being open about where and how you will raise and/or confine your livestock. Know the potential environmental impacts of your livestock operation on surface and ground water resources in your area. Know the soil type(s) your operation sits on and the implications for drainage. If the operation is within 300 metres of surface water that is not contained on your property or 30 metres from a neighbour's well, you will need properly engineered waste storage and management plans.

Know the crop nutrients that are in the manure your livestock produce, and how that compares to your crops' actual nutrient needs. If there a risk of surplus nutrients accumulating in the soil or leaching into surface or ground water, that will have to be addressed. You also need a plan to manage deadstock that can accommodate a worst-case mortality scenario on your livestock operation. These factors guide waste storage and management for livestock operations in Saskatchewan.

If you haven't thought about the above issues, answering them now will help you to develop your own waste storage and management plans. There are confined or intensive livestock operation requirements in Saskatchewan under *The Agricultural Operations Act* and regulations. These requirements include waste storage and waste management plans for penned or confined feeding operations throughout Saskatchewan.



Managing pen runoff is an effective way of protecting water resources.

Following *The Agricultural Operations Act* and its regulations will guide your livestock operation towards a designed set of plans for review and approval. Think about and beyond your livestock operation. Consider the risks to surface and ground water and take the lead in addressing them. Follow government and industry standards to protect water resources. This will help keep the livestock industry secure, sustainable and trusted long into the future. ■

FOR MORE INFO

Visit www.saskatchewan.ca and search for "Regulation of Intensive Livestock Operations in Saskatchewan;" or
Contact a Regional Engineer at either the Moose Jaw, Saskatoon or Yorkton Regional Offices.

The benefits of irrigated feed production for the intensive livestock sector

Gary Kruger, PAg, CCA
Irrigation Agrologist
Crops and Irrigation Branch

One of the benefits of irrigation is the opportunity for intensive livestock operations. Cattle feedlots, hog operations, dairy farms and poultry operations all require feed grain and forages. Although irrigation is not essential to produce the feed grain for these operations, irrigated production can attract the livestock feeding industry to an irrigation district. The higher yields under irrigation minimize the land base required to support the livestock. Transportation costs for feed are minimized since it is sourced near the operation.

As well as the economic benefit, there are several agronomic benefits to be gained from locating a livestock enterprise near irrigation. Nutrient cycling is enhanced by integrated feed grain and livestock production. The manure can be returned to the field that the forage or grain came from. The nutrients in the manure provide virtually everything the crop needs for vigorous growth. High phosphorus levels supplied by the manure can be balanced by incorporating crops such as canola or faba bean, which have a high phosphorus content in the harvested grain. In addition to feeding the growing crop, the manure improves soil tilth and reduces erosion risk on vulnerable soils. Rates of water infiltration into the soil are enhanced through improved soil aeration. Fields that produce feed grains may have the straw returned to the field at harvest to maintain potassium fertility in the soil and improve the soil structure. If the straw is removed for bedding or forage, the manure is easily scheduled for application to the field that it came from.

Another major benefit of irrigated production for a livestock operation is the reduced risk of a feed shortage due to drought.

In recent years, disease has been an issue on irrigated feed crops. Fusarium infection levels have risen in many irrigated fields, indicating the need for longer rotations and improved integration of grain and livestock enterprises. Some Fusarium species produce mycotoxins, which lower the quality of the feed. Of all the types of livestock, poultry show the greatest tolerance to mycotoxins from fusarium. Pigs, on the other hand, are most likely to experience impaired performance from mycotoxins in the feed. Applying a fungicide to control fusarium in fields is essential with irrigated feed grain production. ■

FOR MORE INFO

Contact Gary Kruger, Irrigation Agrologist, at 306-867-5524 or gary.kruger@gov.sk.ca.

Planning for 2018 calving season

Colby Elford BSc, PAg
Regional Livestock Specialist, Moose Jaw
Regional Services Branch

Thinking about 2018 may seem a little bit ridiculous when 2017 is only three months old, but in the cattle business, it pays to plan ahead. Decisions made now will have an impact for years to come. If changes are to be made, planning for these changes needs to start early.

Moving calving dates

Some producers with the facilities and available labour are looking at calving earlier in the year. Although calving in months with snow and cold adds a significant amount to the workload, it can pay off when marketing heavier calves in the fall. If producers are considering this type of change, animal nutrition needs to be at the forefront of the plan. Nutritional needs must be met if cows are expected to return to cycling, and become pregnant quickly, while still nursing a calf. An adequate mineral program is an essential part of meeting those nutritional requirements.

Sire selection

The calves born in 2018 will be products of the decisions made about bulls this spring. Sire selection has an important and long-lasting effect on the herd. Females from this calf crop may be raising calves in your herd for the next decade. It is important to choose bulls that will meet the long-term goals of your operation. Now is the time to consider your breeding season and develop a plan. Consider using a specific bull on cows whose heifers you want to keep and a different style of bull for the rest. Perhaps now is the time to consider capitalizing on hybrid vigour by adding a sire of a different breed to your operation. The number, style and breed of bulls you add to your herd will all have an impact on your 2018 calving season.

Calving season duration

The length of your calving season is largely determined by the length of your breeding season. Having a defined breeding season ends drag-on calving seasons and frees up time for other ranch operations such as seeding. Removing sires and conducting pregnancy tests also adds marketing opportunities for cows that did not get bred. ■

FOR MORE INFO

Contact local Regional Livestock Specialist at a nearby Saskatchewan Agriculture Regional Office; or
Call the Agriculture Knowledge Centre at 1-866-457-2377.

The value of fertilizing forages

Charlotte Ward, MSc, PAg
Regional Forage Specialist, Yorkton
Regional Services Branch

The value of fertilizing forages is often overlooked. As a crop that has been traditionally thought of as low input and low value, producers often hesitate to spend fertilizer dollars on forages. But by not managing forage fertility, are they leaving money on the table?

Forages are high users of soil nutrients. For example, 70 per cent alfalfa and 30 per cent bromegrass hay results in the exportation of 50 lb. of nitrogen (N), 13 lb. of phosphate (P), 55 lb. of potassium (K) and six lb. of sulfur (S) for every ton of dry matter produced. To maintain a high level of production, these exported nutrients must be replaced. A fertility plan must address the species present, expected forage stand response, overall nutrient removal, cost of additional nutrients, value of additional forage production and alternative forage sources. Every fertility plan should start with a soil test.

Commercial fertilizer can be a viable option to replace exported nutrients. Grass-dominated stands respond well to N fertilizer. In legume-dominated fields, numerous studies have identified P, K and S as key nutrients for improving or maintaining yield through enhanced N fixation and improved winter survival of alfalfa.

The accompanying table shows the effect of managing soil fertility on a three-year-old alfalfa-dominated hay stand in the Black soil zone. The calculations were made based on the following assumptions:

- Fertility plan will maintain current yield of two tons per acre per year.
- Cutting, baling and bale hauling costs based on the Custom and Rental Rate Guide.
- Fertilizer prices from December 2016 (46-0-0 at $440/MT, 11-52-0 at $615/MT, 0-0-62 at $355/MT, 20-0-0-24 at $390/MT).
- One-time broadcast fertilizer application of 75 lb. P, 100 lb. K and 20 lb. S actual nutrients per acre.

Expected Three Year Response or Costs	Non-Fertilized	Fertilized
Expected yield (tons/acre)	3.75	6
Forage production (bales/acre)	5	8
Land and establishment costs ($/acre)	$ 142.26	$ 142.26
Fertilizer cost ($/acre)	–	$ 75.09
Cutting cost ($/acre)	$ 35.91	$ 35.91
Baling cost ($/acre)	$ 52.81	$ 84.32
Hauling cost ($/acre)	$ 33.02	$ 52.72
TOTAL COSTS ($/acre)	**$ 263.99**	**$ 366.36**
TOTAL COSTS ($/bale)	**$ 52.69**	**$ 45.80**

Fertilizing at current prices can be a wise investment.

In this example, maintaining highly productive stands with greater legume content results in lower fixed costs per bale, and overall savings of nearly $7 per bale. The “Economics of Commercial Fertilizer for Hay and Pasture” is one tool available on **www.saskatchewan.ca** that allows producers to input their own numbers and explore different scenarios.

When determining net returns resulting from fertilizing forages, producers must also consider alternative sources of nutrients (winter field feeding, manure), feed sources and land uses (annual crops). ■

FOR MORE INFO

Contact a Regional Forage Specialist at a nearby Saskatchewan Agriculture Regional Office; or
Call the Agriculture Knowledge Centre at 1-866-457-2377.

Forages to the rescue of saline and erodible soils

Nadia Mori, PAg
Regional Forage Specialist, Watrous
Regional Services Branch

Protecting soil health and increasing crop production can go hand in hand. Perennial forages are not just a good source of livestock feed, they are also an invaluable tool in stabilizing saline soils and soils at risk of erosion.

Perennial forages can reduce soil salinity. It's not magic, just science. Salinity is caused by excessive evaporation of water containing dissolved salts. When the water evaporates at the soil surface, the salt crystals are left behind and can increase soil salinity over time. Salt-tolerant forages help lower the water table and reduce the amount of salt crystals deposited on the soil surface. Alfalfa in particular is a thirsty forage legume, and its taproot can access moisture deep in the soil. So long as salt concentrations are low enough that seedlings can get established, alfalfa is a great legume to include in forage mixtures for saline areas.

Perennial forages are overall great soil builders. The extensive root systems of forage grasses can access nutrients deep in the soil layers beyond the reach of annual crops. As roots die and are replaced, they leave behind fine soil channels which increase soil aeration and water infiltration, essentially giving the soil a sponge-like absorptive quality. The year-round vegetative cover provided by forages holds the soil in place, captures snow and slows spring runoff. Any soil at risk of erosion can benefit from perennial forage cover.

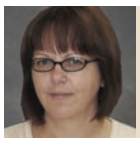
The Farm Stewardship Program, funded under the federal-provincial-territorial Growing Forward 2 initiative, helps producers protect high-risk erodible and saline soils through the establishment of perennial forages. This Best Management Practice (BMP) is offered as a rebate, meaning that, after the forage establishment work has been completed, cost-share funding is provided to qualifying applicants. Because certain restrictions apply, it is best to discuss the project with a Regional Forage Specialist prior to purchasing any forage seed. Forage seed should be ordered early, as certain forage varieties can sell out. If you plan on taking advantage of this BMP funding, 2017 is the year to do so. Rebate applications have to be submitted by January 31, 2018, which only leaves the 2017 growing season to get those seeds in the ground. ■

Perennial forages are great soil builders. Photo credit: Alicia Sopatyk.

FOR MORE INFO

Contact a Regional Forage Specialist at a nearby Saskatchewan Agriculture Regional Office;
Call the Program Design and Delivery Branch at 1-877-874-5365;
or Call the Agriculture Knowledge Centre at 1-866-457-2377.

BVD program fights disease that costs the cattle industry millions annually



Wendy Wilkins, DVM, PhD
Disease Surveillance Veterinarian
Livestock Branch

Bovine viral diarrhea (BVD) costs the cattle industry millions of dollars annually. Herds with BVD problems have significantly lower weaning weights and more health problems overall. The effect that BVD has on herd fertility can vary from a nagging problem to a catastrophe with the potential to devastate a herd in a single year.

Persistently infected animals, the primary reservoirs of the disease, are present in more than 10 per cent of cow-calf herds tested in Western Canada. These animals shed large amounts of the virus constantly throughout their lives, from birth to death. To identify herds with circulating BVD—as evidenced by the presence of a persistently infected animal—Saskatchewan Agriculture implemented a provincial BVDV Screening and Control Program in 2013 with funding provided under the federal-provincial-territorial Growing Forward 2 initiative. Once the infected herds have been identified, the program helps those producers manage the disease in their herds. The program provides free testing to detect persistently infected animals in a herd. Any aborted, stillborn, deformed or dead calf from the current calf crop, and any yearling with symptoms consistent with persistent BVD infection, is eligible for screening, provided the animal still resides on its farm of birth.

Veterinarians can collect samples from cases submitted by producers or animals seen during daily practice. Each veterinary clinic participating in the program is sent sampling supplies and instructions, and the cost of shipping a sample is covered by the program when the clinic uses the pre-paid shipping labels provided by the Ministry. Producers can collect skin samples from suspected cases (an ear notch is the preferred method), but are asked to contact their local veterinarian for collection and submission instructions.

If BVD is confirmed via a positive test result, the program will reimburse up to $500 of the veterinary fees associated with the development and implementation of a BVDV control strategy for the infected herd. **This funding is available to any Saskatchewan producer with a confirmed BVD infection, whether testing was done under the provincial program or paid for by the producer.** ■

FOR MORE INFO

Contact Wendy Wilkins, Disease Surveillance Veterinarian, at 306-798-0253 or wendy.wilkins@gov.sk.ca.

Crop Insurance is here for you

Saskatchewan's agricultural industry continues to grow and evolve in ways that make it possible for the province to help feed much of the world with its exports. In recent years, we have seen new technologies emerge and change the way producers' farm, making food production more efficient. The 2017 Crop Insurance Program is meant to do just that: give producers the coverage and peace of mind they need to manage their farming operations.

At SCIC, we continually work with industry to ensure programs are effective and meet the needs of today's farmers and ranchers. By working with industry, SCIC stays up to date as farming evolves and tailors its programs to provide the protection producers need.

Tailored coverage options

SCIC knows not every farming operation is the same. This is why the Crop Insurance Program is designed to allow producers to select their own insurance options and personalize their individual coverage. The program offers coverage of 50, 60, 70 or 80 per cent of a producer's long-term average yield. This range of options enables producers to select the coverage that best protects their farms. When planning what crops to insure, remember it is better to select all that may be grown and want to be insured. There is no additional penalty if the producer decides not to grow. Producers can decide to change their selection of crops anytime before the March 31 deadline.

Experienced and reliable

For over 55 years, SCIC has been providing insurance to Saskatchewan's farmers and ranchers. With SCIC's long-standing history and experience in providing risk protection, producers can trust they have put their operation in reliable hands. Experienced and knowledgeable staff, who are more often than not farmers themselves, are ready and able to help producers understand their options and walk them through the coverage selection process, ensuring the right fit for their needs.

Our program works!

SCIC continues to take quick action on claims and is dedicated the helping producers recover from the challenges of 2016. The estimated Crop Insurance payouts for 2016 are over $500 million. Producers in claim positions were covered for losses largely due to quality issues and disease. SCIC is committed to delivering the programs producers know they can count on when the unexpected occurs.

Additional Features

PREMIUM

The premium a producer pays will reflect the coverage selected—the higher the coverage, the higher the premium. There are, however, a number of other factors influencing premium cost, such as the farm's historical production, claim history and area of the province where they farm. SCIC uses experience discounts and surcharges to recognize the risk differences among customers. Customers without a history of repeated claims will have reduced premiums.

PRICE OPTIONS

Producers have a range of options for pricing their insured crops. The base price is most commonly selected. This price is set in January using market forecasting provided by Agriculture and Agri-Food Canada. Producers can also select the Low Price Option for each crop, which is set at 85 per cent of the base price, which comes at a lower premium.

There are three other price options, the Variable and In-Season Price options, which provide insured prices later in the year, and the Contract Price Option, which allows producers to use a combination of their contracted price and the Crop Insurance base price to develop their coverage. The Variable Price Option uses July price forecasts to set prices which better represent current market conditions with premium values known up-front, giving premium certainty to producers. The In-Season Price Option uses actual crop price averages from the September-to-February period. The average from that six-month period is used for the producer's coverage and the premium is set up-front, ensuring producers are not caught with a premium hike should crop prices rise. The Contract Price Option is available on specific crops that are commonly contracted, and producers need to indicate by March 31 that they are selecting the Contract Price Option for their crop and provide a copy of the contract by May 31.

INDIVIDUAL COVERAGE

One of the important aspects of the Crop Insurance Program is the individualization of coverage for each operation. Historical production and claim history factor into the coverage and associated premium which, when combined with the various coverage levels and pricing options, gives each producer unique Crop Insurance coverage.

Crop Insurance customers receive coverage for yield-loss on their crops, but also have coverage for a number of other factors. Compensation can be accessed when the crop quality does not meet the base grade. The Establishment Benefit Feature provides coverage for seeded crops that do not properly establish. Producers who have land in a seedable condition but are unable to plant a crop due to excess spring moisture can access benefits through the Unseeded Acreage Feature.

Producers who grow different types of crops or use different methods of production also have risk protection through the Crop Insurance Program. Irrigation coverage is available for producers. The Diversification Option provides coverage on crops not eligible through the general Crop Insurance Program. Producers of pedigreed seed, organic crops, forage, grain corn, soybean and honey can also participate through additional programming. Crop Insurance also offers weather-based programs.

CROP AVERAGING PROGRAM

Producers wanting to increase their coverage without increasing their costs may wish to consider the Crop Averaging Program. Under this option, producers can select and pay premium at the 50-, 60-, 70- and 80-per-cent level in return for higher coverage, in some cases more than 10-per-cent additional coverage, depending on their own crop mix. This option allows producers to group together any production losses on all their eligible crops in return for higher coverage. Eligible crops are: canola, lentils, wheat, durum, barley, field peas, flax, oats, mustard and canaryseed, including irrigated, organic and pedigreed crops.

CROPCONNECT

SCIC customers now have the ability to complete their business online. One of the greatest features of CropConnect is the ability to view historical data, as well as up-to-date yield and claim history and the latest account statements.

Additionally, producers can fill out Seeded Acreage Reports and production and stored grain declarations, file a claim, enter insurance selections, estimate costs and add or delete crops from the convenience of their homes or mobile phones. Be online, not in line using CropConnect. ■

THE GUIDE TO CROP PROTECTION IS COMING

The 2017 Guide to Crop Protection will be available for pick up later this month; keep up with our Twitter feed @SkAgriculture to stay up to date on when you can pick up your copy. The guide is intended for Saskatchewan residents only and is available free of charge.

FOR MORE INFORMATION: Visit www.saskatchewan.ca/agriculture and search "Guide to Crop Protection," or call the Agriculture Knowledge Centre at 1-866-457-2377. ■

The Saskatchewan Crop Reporting Service needs your help

Shannon Friesen, PAg
Cropping Management Specialist, Moose Jaw
Regional Services Branch

Did you know that it takes a team of more than 200 volunteers to help produce the weekly Crop Report?

These valuable volunteers are spread across the province and help ensure that the Crop Report is one of Saskatchewan Agriculture's most sought-after publications. They provide weather and production information each week so that industry and the general public have a better understanding of challenges facing farmers throughout the growing season. The information is used both locally and worldwide by many agricultural companies, organizations and individuals. Volunteers are crucial to the Crop Reporting Service as their contributions help shape the agricultural industry.

Pam Waldenberger, who farms at Marquis and has been a volunteer crop reporter since 2010, explains why she does it: "The Crop Report is a simple and informative task that needs to be reported once a week. I enjoy keeping records of crop conditions, crop progress and the amount of rainfall that are received each year. That way I can compare results from year-to-year and have a better understanding as to what environmental conditions may have contributed to my crops either flourishing, or unfortunately struggling."

Saskatchewan Agriculture is seeking volunteers like Pam who have an interest in participating in Crop Report surveys throughout the growing season. These surveys include questions on weekly rainfall, topsoil moisture conditions, seeding progress, crop development and staging, crop damage, harvest progress and crop yields. The volunteers also track haying progress and yields, the state of livestock feed supplies and pasture conditions, as well as weather-related damage and conditions.

Each week from seeding to harvest, Crop Reporters use phone, fax or an online survey to submit their reports. The Ministry then compiles the information into the weekly Crop Report that is, in turn, used by radio and television stations, newspapers and other media outlets to discuss cropping conditions.

There are many rural municipalities that need crop reporters, and volunteers are still welcome to join the Crop Reporting Service even if their RM currently has a volunteer reporter. The more information that is gathered from crop reporters, the more accurate the report will be. If you want to become part of the Crop Report team, get in touch with the Agriculture Knowledge Centre. ■

FOR MORE INFO

Contact the Agriculture Knowledge Centre at 1-866-457-2377 or cropreport@gov.sk.ca.

Managing through a transition

Karen Smith, PAg
Regional Farm Business Management Specialist, Tisdale
Regional Services Branch

A transition plan is an important tool in the transfer of ownership of an agricultural operation, either from one generation of the family to the next, or to an outside party. The process can often be overwhelming and stressful, and many people choose to simply ignore the situation until it is placed in front of them. However, proper planning well in advance can help ensure that family is prepared, and the transition is smooth.

There are many elements to a transition and it takes time to put them all in place. The earlier the planning starts, the more options you will have and the better your chances of success. Rather than thinking of it as a plan, it may help to see the transition as more of a process which takes place over a specified timeframe.

Consider who you want at the table during the initial discussion about the farm transition. Have a conversation that gets everyone on the same page by allowing people to share their thoughts and ideas regarding their vision for the future of the farm. While this may be the hardest part of the process, it's quite possibly the most important part.

Saskatchewan Agriculture is hosting a workshop on "Family Farm Transition: Managing Change on the Multi-Generation Farm." This

workshop will help to organize your thoughts and actions to enable you to take one step at a time to ensure a successful transition. You will learn some useful strategies to make this change, while keeping the farm viable, your retirement comfortable and your family on good terms. Author Jeanne Martinson will be joining the workshop to help participants focus on differences in operations and generations. Her experience and knowledge will help participants explore some of the issues that may exist in their families and offer strategies for improvement.

Join us in Kindersley on March 21, Humboldt on March 22 and Tisdale on March 23 and learn how to plan for transition. ■

FOR MORE INFO

Contact Karen Smith, Regional Farm Business Management Specialist, at 306-878-8841 or karen.smith@gov.sk.ca, or Brenda Stefanson, Regional Farm Business Management Specialist, at 306-946-3214 or brenda.stefanson@gov.sk.ca.

Virtual reality ranch helps build public trust in agriculture

Michelle Panko
Agriculture Awareness Specialist
Regional Services Branch

Not everybody has the opportunity to visit a ranch and experience life there, but thanks to a virtual reality ranch developed by the Saskatchewan Cattlemen's Association (SCA), they can experience the next best thing to being there.

Using 360-degree cameras, the SCA took video of a cattle ranch and incorporated the footage with commentary from the rancher, creating a virtual reality ranch presented in four one-minute-long videos. Putting on the virtual reality headset transports the viewer directly to the ranch among a herd of cattle. With a turn of the head, the viewer can look in any direction to get an up-close and personal experience. The cattle come right up to the camera and it feels as if the viewer can just reach out and touch them.

"We would love to be able to take everyone to ranches and farms to show them what goes on, but logistically, it just doesn't work," explained Ryder Lee, the SCA's chief executive officer. "Through the use of 360-degree cameras, we can take them and put them right on the ground and talk to them via headphones as they look around. The industry has always been transparent, just too far away. This is a step in shortening the distance."

There are many myths and misconceptions that surround modern agriculture and the industry is working hard to correct them. It is a lot of work. Not only do producers have to do the right things on their farms and ranches, they also have to engage their critics in value-based conversations about what they do and why. The SCA's virtual reality project is a new and unique way of engaging the non-farmer and telling the story of modern agriculture. The purpose of the videos is to start conversations with everyone from children and consumers to producers and academics. The SCA plans to take their virtual reality experience to trade shows where they hope to connect with the public, and particularly youth.

The project was funded through the Agriculture Awareness Initiative Program, which will provide matching funds for innovative industry-led awareness projects. This program, which ends in March 2018, is funded under Growing Forward 2, a federal-provincial-territorial initiative. Anyone with an innovative idea or wanting more information on the program should contact Michelle Panko at 306-787-3477. ■

FOR MORE INFO

Visit www.saskatchewan.ca and search for "Agriculture Awareness Initiative."

I want to be farmer when I grow up! — Celebrating Canadian Agriculture Literacy Month

Krystal Aulie
Provincial Agriculture Awareness Specialist
Regional Services Branch

"What do you want to be when you grow up?" the reporter asked Michael and Mia. They excitedly responded: "A farmer! A farmer!"

The Adventures of Michael and Mia might be a fictional story, but it is one that has hit home with elementary students across the country. It follows twins Michael and Mia as they plant their first garden, while drawing comparisons to how farmers are stewards of the land. This book is just one of the great agricultural stories that will be read to students across the province this month as part of Canadian Agriculture Literacy Month.

Penny McCall with the Ministry of Agriculture's Crops and Irrigation Branch fields questions from grade one children during Ag Literacy Month.

Canadian Agriculture Literacy Month is an Agriculture in the Classroom initiative bringing agriculture to life in Canadian classrooms as students participate in activities to learn about, connect to and understand this important industry. In Saskatchewan, Agriculture in the Classroom celebrates the month by arranging for industry volunteers—farmers, ranchers and professionals—to visit classrooms across the province and share their personal agricultural experiences and read a story.

This program was launched in 2012, when a week in March was declared Canadian Agriculture Literacy Week. Last year, the program reached more than 4,000 students in Saskatchewan, thanks to the support of more than 100 industry volunteers. Due to popular demand, the program has now grown to last an entire month. If the program is to continue to expand, more producers need to step up (even if it's outside their comfort zones) and participate in the celebrations.

There are two ways to get involved:

1. **Volunteer to visit a classroom** – a classroom visit only takes an hour, and Agriculture in the Classroom provides everything you need, including the story books and suggestions for activities.
2. **Encourage teachers to sign up** – help spread the word to elementary teachers about this free, curriculum-linked program.

Not all kids are quite as sure about what they want to be when they grow as Michael and Mia, but thanks to programs like this, agriculture is at least on the radar for students who participate. ■

FOR MORE INFO

Visit Agriculture in the Classroom at www.aitc.sk.ca.

Events calendar

Date	Event	Location	Phone	Internet
March 1, 2017	Canadian Agriculture Literacy Month	Saskatchewan	306-933-5224	**www.aitc.sk.ca**
March 1, 2017	Rural Women's Month	Saskatchewan		
March 2 – 3, 2017	2nd Annual Celebrating Rural Ranching Women	Elks Hall Maple Creek, SK	1-866-457-2377	**www.saskatchewan.ca**
March 6, 2017	Advancing Women Conference	Hyatt Regency Calgary, AB	403-686-8407	**www.events@irismeck.com**
March 7, 2017	Think Wheat 2017	Rosetown, SK		**www.saskwheatcommission.com**
March 8, 2017	Think Wheat 2017	Humboldt, SK		**www.saskwheatcommission.com**
March 8, 2017	Moose Mountain Ag Day	Prairie Place Hall Arcola, SK	1-866-457-2377	**www.saskatchewan.ca**
March 12 – 18, 2017	Canadian Agriculture Safety Week	Saskatchewan	1-877-452-2272	**www.agsafetyweek.ca**
March 31, 2017	Deadline to apply, reinstate, cancel or make changes to your 2017 Crop Insurance Contract.	Saskatchewan Crop Insurance Corporation	1-888-935-0000	**www.saskcropinsurance.com**
March 31, 2017	Deadline to submit your interim application to AgriStability.	Saskatchewan Crop Insurance Corporation	1-888-935-0000	**www.saskcropinsurance.com**

Preparing the next generation of agriculture's leaders

Katelyn Duncan
Agriculture Awareness Specialist
Regional Services Branch

The structure of the agricultural industry is changing. Consolidation of farms and a declining number of small operators has resulted in fewer people involved in primary production, and a smaller pool of candidates from which to fill leadership roles in industry organizations. As many current board and commission directors are near retirement, a leadership void could be left. This makes building and sustaining leadership capacity in the sector a critical task.

In response, Saskatchewan Agriculture developed the Youth Leadership and Mentorship Program under the federal-provincial-territorial Growing Forward 2 (GF2) agreement. Modeled after the Cattlemen's Young Leaders Program (CYL), funding is provided to industry associations to co-ordinate and support mentorships between young producers and current industry leaders. Mentees gain valuable experience by attending events to develop their networks and gain a broader perspective of their industry. Practical skills, such as public speaking and governance, along with personality and leadership style assessments, help young producers become adaptable to change, improving their farm businesses and the agriculture industry.

As a young rancher from Whitewood, Ryan Beierbach found value in participating in CYL and is now the president of the Saskatchewan Cattleman's Association (SCA), the SCA representative on the Canadian Roundtable for Sustainable Beef, a director on the Beef Cattle Research Council and a member of the Whitewood Rodeo Committee. He attributes his mentorship relationship through the CYL Program to fostering his personal and professional development within the industry. Now, 15 years into his ranching career, Ryan knows that getting young people involved in leadership roles is critical to ensuring the future growth and success of the industry.

"For me, getting to interact and communicate with influential people from all over the country was a great way to gain practical business knowledge," he said. "I was able to take advantage of business opportunities and sit at the table to discuss policy issues that affect cattle producers. These experiences gave me the skills and confidence to step into the role of SCA president."

The Youth Leadership and Mentorship Program is one way to ensure that the agricultural industry has a leadership succession plan. The program comes to an end in March 2018 when GF2 expires, so interested producers are encouraged to contact a participating industry association soon. ■

FOR MORE INFO Email awareness@gov.sk.ca.

Government of Saskatchewan