

# Saskatchewan Forage Seed Development Commission Annual Report 2019-2020 January 2021: Celebrating 15 years

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Saskatchewan Forage Seed Development Commission, grower field red clover, near Carrot River, August 2020.



Photo credit: Manitoba Forage Seed Growers Association, commercial field perennial ryegrass.



Saskatchewan Forage Seed Development Commission, grower field timothy, n.d.





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The Saskatchewan Forage Seed Development Commission (SFSDC), established in June 2005 under the *Agri-Food Act*, is a producer-led organization with the mandate to improve the forage seed industry in Saskatchewan. We have a research focus, and we strive to help our producers become more profitable and enhance the competitiveness of the agriculture industry. We fund various types of activities described in our regulations, the Forage Seed Development Commission Development Plan, by collecting a levy on all forage legumes (not including alfalfa), turf grasses, forage grasses, and amenity, restoration, and reclamation species. The levy is 0.75% of the gross value of all forage seed marketed upon final settlement made to the producer, by a registered forage seed buyer. All grades of forage seed and all potential mixtures are subject to the levy, which is refundable upon request to the SFSDC office.

## State of the Industry, July 01, 2019-June 30, 2020

### Forage Seed Deliveries 2019-2020

In 2019/20, 184 growers contributed levy to the SFSDC. Eight forage seed buyers collected a levy on deliveries of 20 different species of forage seed legumes and grasses (see Table 1 below). The volume of forage seed deliveries of 7.3 M kg for 2019-2020 was up from the previous year deliveries of 5.7 M kg and the value of deliveries increased by \$.83 M for a farm gate value of approximately \$11.9 M. Export data by David Wong, Alberta is based on Statistics Canada data and Province of Export.

**Table 1: Saskatchewan forage seed deliveries, weight, farm gate value, and levy collected and Statistic Canada value of value provincial exports, 2019-2020.**

Crop Kind	SK Forage Seed Commission Deliveries			Exports <sup>1</sup>	
	Net Weight (kg)	Value (\$)	Levy (\$)	Quantity (kg)	Value (\$)
Clover, Red	1,110,768	\$2,698,041	\$20,241	657,716	\$1,244,178
Clover, Alsike	638,452	\$1,326,978	\$9,847	630,500	\$2,178,159
Clover, Sweet	258,891	\$217,757	\$1,633	190,511	\$554,121
Birdsfoot Trefoil	9,093	\$44,101	\$331	4,536	\$48,577
Cicer Milkvetch	6,694	\$51,644	\$387	-	-
American Vetch	37	\$1,630	\$12	-	-
<b>TOTAL FORAGE LEGUMES</b>	<b>2,023,935</b>	<b>\$4,340,151</b>	<b>\$32,452</b>	<b>1,614,805</b>	<b>\$4,360,901</b>
Ryegrass, Annual	2,024,652	\$1,383,914	\$9,734	27,216	\$120,888
Ryegrass, Perennial	1,140,249	\$1,542,629	\$11,546	639,572	\$1,648,363
Timothy	853,225	\$1,218,657	\$8,670	539,780	\$1,459,277
Wheatgrass, Slender	245,849	\$707,893	\$5,309	-	-
Wheatgrass, Crested	114,920	\$462,712	\$3,194	149,687	\$952,993
Wheatgrass, Intermediate	152,607	\$331,748	\$2,222	-	-
Fescue, Tall	280,320	\$465,948	\$3,495	-	-
Fescue, Meadow	90,098	\$191,540	\$1,422	13,608	\$46,017
Sheep Fescue	4,316	\$14,273	\$107	-	-
Bromegrass, Hybrid	168,625	\$682,626	\$5,120	-	-
Bromegrass, Meadow	46,179	\$127,269	\$955	13,608	\$66,757
Bromegrass, Smooth	41,489	\$146,614	\$1,100	160,000	\$298,606
Redtop	41,248	\$189,329	\$1,067	-	-
Dahurian Wildrye	78,047	\$172,059	\$1,290	-	-
<b>TOTAL FORAGE GRASSES</b>	<b>5,281,824</b>	<b>\$7,637,211</b>	<b>\$55,230</b>	<b>1,886,964</b>	<b>\$6,262,275</b>
<b>GRAND TOTAL 2019/20</b>	<b>7,305,759</b>	<b>\$11,977,362</b>	<b>\$87,682</b>	<b>3,501,769</b>	<b>\$10,623,176</b>

<sup>1</sup> 2019-2020 Grass and Legume Seed Export data source David Wong, Alberta is based on Statistics Canada data and Province of Export. Available for download at <http://www.peaceforageseed.ca/markets.html>

Of the three types of **clover** crops, red clover deliveries generated the most value in 2019/20, following the 15-year trend. and deliveries increased from 966,000 kg the previous year. Alsike and sweet clover deliveries were higher than last year, however, in both cases, farm gate value was lower than 2018/19.

The two **ryegrass** crops comprised the highest volume (43%) deliveries 3.1 M kg - annual plus perennial ryegrass, followed by the three types of clover with 2.0 M kg seed (28%) deliveries, however, the value of clover seed is substantially higher, \$4.2 M (and 35% levy) versus \$2.9 M (and 24% levy) for the ryegrasses.

**Timothy** remains an important forage seed crop, representing 12% deliveries this year, exceeding combined deliveries of the three wheatgrass crops totalling 513,000 kg (5%) deliveries.

### HOW MANY ACRES?

Using data on the volume of reported deliveries in 2019- 2020, combined with industry agronomist's observations on average yields in Saskatchewan, red clover was grown on about 1700 acres(ac), alsike clover 120 ac and yellow blossom sweet clover 390 ac. Of the grasses, timothy led acreage at nearly 1500 ac, annual ryegrass 705 ac, perennial ryegrass 340 ac, hybrid bromegrass 280 ac, with slender and crested wheatgrass, 230 ac and 195 ac, respectively.

### HOW MUCH VALUE per acre?

Linking acreage estimates with the value of deliveries, the data suggests intermediate wheatgrass and birdsfoot trefoil were the two highest value forage seed crop this year - over \$3,000 per acre. Besides these small acreage-high value crops (each less than 20 ac), the perennial ryegrass, slender and crested wheatgrass, hybrid bromegrass and tall fescue deliveries in 2019- 2020 were valued at \$2,000 to \$2,800 per acre.

Of the **wheatgrasses**, slender wheatgrass had the greatest volume of deliveries whereas the value of crested, averaged over all buyers and grower deliveries, was higher by higher by \$1.11 per kg.

Tall fescue is the most delivered of the **fescue** crops, although the value of sheep fescue is much greater, averaging \$3.30 per kg versus \$2.12 per kg meadow fescue and \$1.66 for tall fescue.

Deliveries designated by forage seed buyers as **organic production** totalled about 45,000 kg with a value of \$206,300 signalling that the niche market for organically produced seed was highly profitable.

**Thank you! to the forage seed buyers who registered with the Commission last year and collected the levy. They are:**

**Birch Rose Acres, Star City SK  
Brett-Young Seeds, Winnipeg MB  
DLF Pickseed Canada, Nipawin SK  
Imperial Seed Ltd, Winnipeg MB  
Interlake Forage Seeds Ltd, Fischer Branch MB  
Northstar Seed Ltd, Neepawa MB  
Nutrien Ag Solutions, Nipawin SK  
Tebbutt Seed, Nipawin SK**

**Check out the SFSDC website for contact information of buyers registered with SFSDC.**

### **Pedigreed Forage Seed Production and Market Value 2019-2020**

The Saskatchewan Seed Guide published by the Saskatchewan Seed Growers Association lists the pedigreed seed growers. The Canadian Seed Growers' Association November Acreage and Membership Report indicates 14,638 acres of inspected pedigreed production of forage seed crops, about 4.4 % of total inspected Saskatchewan acreage.

Pedigreed production of timothy seed represented 28.8% (or 4,209 ac) of inspected forage seed inspected acreage, bromegrasses (17.1% or 2,497 ac), ryegrass (15.9% or 2,331 ac), clovers (15.8% or 2,312 ac), fescue (12.6% or 1,840 ac), wheatgrass (9.2% or 1,349 ac), with birdsfoot trefoil at 0.7% (or 100 acres). Saskatchewan produced the majority (52) of Canadian pedigreed clover seed.

Market information is compiled each year by the Peace Region Forage Seed Association and the information is presented in the industry magazine, Forage Seed News published by the Manitoba Forage Seed Association. Based on analysts' reports (David Wong and Calvin Yodder, Alberta) in the last six years the top main export destinations are: United States, China, The Netherlands, Germany, Italy, and Denmark, together comprising about 92% grass and legume forage seed exports from Canada.

The United States remains the major importer, accounting for approximately 60.2% (or 70.6 M lbs.) of total Canadian exports, followed by China (14.9% or 17.5 M lbs.), The Netherlands (9.5% or 11.1 M lbs.), Germany (4.6% or 5.4 M lbs.), and Italy (1.4% or 1.7 M lbs.) and Denmark (1.2% and 1.4 M lbs.) France, Poland, the United Kingdom, Argentina, Turkey, and Japan, on average, accounting for less than one percent of the total volume of Canada's forage seed exports.

## Forage Seed Provincial Review 2019

The 2019 growing season in north-east Saskatchewan was, in some ways, similar to 2018...a dry spring and wet fall that delayed harvest.

Establishing crops seeded in 2018 were aided by a wet fall followed by a winter with normal temperatures and precipitation. Although most fields had good establishment coming into the 2019 season, a dry and cool spring slowed the development of forage seed crops while some areas were impacted by drought. Weeds in the driest areas were hard to control with herbicides and when rains did come in late spring, so did another flush of weeds. Late spring rains in the driest areas also resulted in a late flush of grass seed heads making stand maturity highly variable. Once the rains started, they continued intermittently throughout the summer right up to the end of September. Despite intermittent rains during the growing season, diseases were generally not a problem this year. Ergot was noticed in some bromegrass fields. It was a typical year for insect infestations with the usual alfalfa weevil, lygus and alfalfa plant bugs affecting alfalfa. Lesser clover leaf weevil was generally not a concern this year in red clover. Grasshoppers were noticed in many forage seed crops but populations were usually below economic thresholds.

With delayed growth, swathing was delayed due to later maturity of grasses. Harvest of grasses was also delayed due to persistent rain after swathing, with some fields harvested at higher than ideal moisture content. Regrowth of grass through the swath, shelling and sprouting were noticed in some of these fields. Seed harvest of clover was delayed due to late maturity and a wet fall as well. Unfortunately, some fields will have to wait until spring to be harvested. Seed yields of forage seed crops harvested in 2019 were highly variable, but annual ryegrass and bromegrass were overall below average. Clover, timothy, fescue, and wheatgrass were average, and perennial ryegrass was above average. Newly seeded fields in 2019 fared well once again this year due to adequate summer and fall rain. This coupled with good soil moisture conditions bodes well for next year.

By Clayton Myhre, Forage Seed Agrologist DLF PICKSEED and Terry Kowalchuk Provincial Forage Specialist Saskatchewan Ministry of Agriculture, Fall Prairie Seeds Newsletter, 2019.

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The fall rain of 2019 slowed harvest and crop deliveries. As noted in the Chair's report to the SFSDC Annual General Meeting, January 2020, *on the production side of things, 2019 proved to be quite challenging for farmers. It is amazing what growers were able to accomplish given the harvest conditions they were given.*

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## The COVID-19 spring

By April, forage seed growers in the northeast area were well into multi-tasking between making deliveries when time was available, harvesting the remaining 2019 crop left lying in the fields, preparing the land, and quickly moving onto seeding operations. By late May-June, growers were spraying and shipping out last year's harvest. Before the SFSDC fiscal year ended on June 30, growers had made record forage seed deliveries.

All this happened amidst COVID-19 changes to the world as we knew it, and for some of our forage seed growers, a bonus was family members moving back home, helping to get things done while studying or working from the farm. COVID-19 impacted the agriculture sector in many other ways. The complexities of the food production and distribution system revealed farm-level vulnerability, creating challenges sourcing, and receiving crop inputs. Access to external, temporary labour pools ground to a halt and in the back of many minds, was a worry about family members becoming infected with the coronavirus. Fortunately, for growers with fields neither affected by hail nor flooding, the crops in the northeast Saskatchewan region were of decent yield and quality.

While the number of COVID-19 cases continued their upward trend, the plans for an in-person SFSDC Annual General Meeting and Grower Information Session in Nipawin, were curtailed. We focused on organizing a virtual AGM that was accessible to all growers and provided transparency and traceability of voting. COVID-19 changed business as usual.

## 2019-2020 Annual General Meeting, January 11, 2021

On January 11, 2021, SFSDC held the 15th Annual General Meeting (AGM) using the Zoom Webinar platform hosted by the Audio Visual (AV) Team at Prairieland Park, Saskatoon. Organizing the first virtual AGM was a daunting challenge, but reflecting on the year, planning for the event was just one addition to the list of how COVID-19 has transformed our lives since March 2019.



*Forage seed growers, directors and managers from other provincial forage seed organizations and different commodity groups connected to the SFSDC Annual General Meeting using landlines, smartphones and computers. There were 114 individuals as attendees for the AGM and the Forages Market Outlook presentation by David McGregor, Imperial Seeds.*

*The SFSDC appreciates the support of the other groups organizing their virtual AGMs, the presenters and the conference attendees who helped make the event a success. Thank-you to the Crop Production Week Board and the Crop Sphere groups of organizations for sharing resources and the patience shown by the 114 attendees at our first virtual AGM.*

*A SPECIAL THANK YOU to all those growers who took part, because of you, we made quorum at our AGM.*



## Agenda SFSDC Annual General Meeting, January 11, 2021, Saskatoon, SK

12:40 Call to Order

### Agenda

- Approval of Agenda (Motion and vote by polling)

Minutes of 2018 2019 AGM, January 14, 2020 Saskatoon

- Approval of the Minutes (Motion and vote by polling)
- Business Arising from the Minutes

### Reports

- Chair Report
- Audit Chair's Financial Report 2019-2020 Audited Financial Statement
- Executive Director Report – fiscal year activities and Proposed Budget 2020-2021
- Vice Chair's Report - Planned Research Activities 2020-2021
- Approval of Reports (Motion and vote by polling)

### New Business

- Appointment of Auditor for 2020-2021 (Motion and vote by polling)
- Director Honorarium (Motion and vote by polling)

### Other Business

1:10 Adjourn AGM (Motion and vote by polling)

1:15 Market Outlook presentation, forage seed crops by David McGregor, Imperial Seed Ltd.

1:30 End Zoom Webinar session

## Minutes SFSDC Annual General Meeting, January 11, 2021, Saskatoon, SK

Saskatchewan Forage Seed Development Commission  
2018-2019 Annual General Meeting  
January 14, 2020 Hall E Prairieland Park, Saskatoon

Chair: James Silcox

Recording: Jo-Anne Relf-Eckstein

1. Meeting called to order at 10:58 AM
2. Agenda
  - Moved by Spencer Staffen, seconded by Denton Peifer to approve the agenda. Carried
3. Minutes of the 2017-2018 Annual General Meeting were reviewed.
  - Moved by Morley Doerksen, seconded by David Cox that the Minutes of the 2017-2018 Annual General Meeting be accepted. Carried
  - Business arising from the Minutes. None
4. Directors
  - Returning directors are James Silcox, Spencer Staffen, Morris Nycholat, David Cox, Morley Doerksen, Denton Peifer, and Bill Biligetu (appointed director)
5. Reports
  - Chair Report – James Silcox
  - Executive Director Report – Jo-Anne Relf-Eckstein
    - The SFSDC Board of Directors hosted the grower information session in Saskatoon on January 17, 2019 and held four board meetings during 2018-2019 (July and November 2018, January and June 2019).
    - SFSDC helped host the research plot tour and barbecue on July 26, 2018.
    - Two editions of the Prairie Seeds Newsletter were published and
    - The levy funds collected were \$68,710 and \$1,491 was refunded, leaving 175 growers contributing a levy. The 2018-2019 Audited Financial Report was reviewed by Morley Doerksen. The List of Planned Programs and Activities for 2019-2020 was described by Spencer Staffen. The 2018-2019 Budget was reviewed by Jo-Anne Relf-Eckstein.
    - Moved by Denton Peifer, seconded by Spencer Staffen that all reports be accepted. Carried.
6. New Business
  - Moved by David Cox, seconded by Denton Peifer to appoint NeuPath Group, Nipawin SK as Auditor for 2019-2020. Carried.
7. Other Business. None.
8. Moved by Spencer Staffen to adjourn the Annual General Meeting at 11:17, seconded by Dave Maxwell. Carried.

Note: attendance at the AGM was 44 people, however, there were only 9 registered forage seed producers present, falling short of quorum of 15 registered producers.



## Chair's Report: James Silcox, January 11, 2021

Greetings to all forage seed producers, industry partners, Saskatchewan Ag Ministry, and other associates. We have a great level of participation for our first virtual AGM, thank you to all who connected with us.

This will be my last annual report as your Chair of the Saskatchewan Forage Seed Development Commission. I have been on the Board since 2012. While finishing my 3rd and final term on the board, I have had a chance to look back and reflect on all the changes that have happened. Over that span, we have seen the size and scope of research expand and intensify to the point of having multiple sites across the province working together to provide growers solutions to ever-growing production and marketing challenges. We are seeing an expansion of species and varieties available to farmers to grow economically in Saskatchewan. Quality challenges are being addressed as well to ensure that Saskatchewan grown product continues to hold its reputation as a preferred product that is being produced sustainably. We cannot do this work without the cooperation, coordination, and dedication of many different entities across the three prairie provinces. A special thanks to all the individuals, grower associations, private businesses, and government agencies and officials, that have made all this a reality.

On the production side of things, it was great to see everyone in the field busy getting their harvest completed early this year in comparison to last year! It is nice to be able to focus on the task at hand and not worry about all the other things in this crazy world that are out of our control. Along with traditional crops, forage seed crops are seeing steady harvest progress. Early reports show variable yields from poor to good, but by year end, growers ended up delivering an above average volume of crop, even if it did take until spring to get harvest done!

2020 has proved challenging for our board. Adopting different practices for meetings with members, researchers, and industry specialists has taken time to implement. As a board, we had to make some hard decisions and cut some planned research initiatives for this year with the hope we can realize these next year. We greatly appreciate our partners' understanding of this process. So, with an end to the 2020 production season in site, we look forward to planning for 2021. Time will tell what challenges and opportunities it will hold for us all.

Most of our research plots could be harvested and I look forward to going through all the data on them as it continues to be put together. I would like to thank the various people for helping to make these projects happen in the face of adversity. Your Commission is very fortunate to have excellent researchers such as Brianne McInnes at the Northeast Agriculture Research Foundation (NARF), Michael Steckler and Taryn Heidecker at A Horizon Ag Research, and Dr. Bill Biligetu, Dr. Sean Prager at the University of Saskatchewan who dedicate themselves to the forage industry. Our board continues an open dialogue with growers on possible research initiatives, so if you have an idea or a production challenge, we are eager to hear it.

At this time, I would like to take this moment to thank all the members and contributors of our Board. I have really enjoyed getting to know you all better and working with you through the years. We have been successful in leveraging your levy dollars through research funding programs like Saskatchewan Agriculture's ADOPT and now getting more funding support from the Saskatchewan Agriculture Development Fund. I want to acknowledge everyone with the Ministry of Agriculture who has always been there when we needed assistance. A special thanks to our Executive Director, JoAnne Relf-Eckstein, for the day-to-day workings of the Commission. This was Jo Anne's second year working with our commission and is getting to know the many team members our Commission interacts with throughout the year. Thank you and we look forward to working with you in the future.

## Audit Chair Report: David Cox, January 11, 2021

The audited Financial Statement was published in the fall 2020 newsletter and mailed in December to all to forage seed growers contributing to the levy in the last two years. David Cox, the Audit Chair, presented the audited financial statement. Here are some highlights.

- NeuPath Group, Nipawin SK conducted the audit for 2019/20.
- Net Assets reached \$251,856 with 65% (\$165,952) invested in term deposits.
- Because of a perfect storm of late harvest–late deliveries and COVID-19 restrictions triggering the forage seed industry accountants and controllers to work from home offices, levy receivables were substantial this year. This affected cash flows and we transferred money from savings, where funds from a term deposit were aside, waiting for an interest rate promotion.
- Also affected by COVID-19, were delays with invoicing, noted in the accounts payable. By fiscal year 2019/20 end, net assets are \$211,893.
- Levy refunds of \$2,216 were slightly higher absolute value than the previous year, but at 2.4% relative value, refund requests remain under the long-term average proportion of 3.8% refund requests.
- The levy rate of 0.75% of the gross value of forage seed marketed upon final settlement to producers has not changed since 2005, resulting in a deficiency of revenue over expenses, similar to prior fiscal years. We make applications to access grant funding opportunities to support additional activities, but opportunities remain limited.
- Growers expressed concerns about administration expenses. With one part-time contract staff, salary cost of \$18,412 accounted for 17% total expenses. Research accounted for 54% expenses (\$58,127) about \$23,000 is allocated for contract research, \$14,000 to co-fund Agriculture Development Fund (ADF) projects, and \$3,000 levy was put toward upgrading the forages breeding facilities as part of advancing the world-class breeding facility at the Crop Development Centre (CDC) at the University of Saskatchewan (USask) in Saskatoon.

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**INDEPENDENT AUDITOR'S REPORT**

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To the Members of Saskatchewan Forage Seed Development Commission

Opinion

We have audited the financial statements of Saskatchewan Forage Seed Development Commission (the Commission), which comprise the statement of financial position as at June 30, 2020, and the statements of changes in net assets, revenues and expenditures and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Commission as at June 30, 2020, and the results of its operations and cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations (ASNPO).

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Commission in accordance with ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with ASNPO, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Commission's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Commission or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Commission's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

(continues)

Independent Auditor's Report to the Members of Saskatchewan Forage Seed Development Commission  
(continued)

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Commission's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Commission's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Commission to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Nipawin, Saskatchewan  
November 17, 2020



Chartered Professional Accountants

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## MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

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The financial statements of Saskatchewan Forage Seed Development Commission have been prepared in accordance with Canadian accounting standards for not-for-profit organizations (ASNPO). When alternative accounting methods exist, management has chosen those it deems most appropriate in the circumstances. These statements include certain amounts based on management's estimates and judgments. Management has determined such amounts based on a reasonable basis in order to ensure that the financial statements are presented fairly in all material respects.

The integrity and reliability of Saskatchewan Forage Seed Development Commission's reporting systems are achieved through the use of formal policies and procedures, the careful selection of employees and an appropriate division of responsibilities. These systems are designed to provide reasonable assurance that the financial information is reliable and accurate.

The Board of Directors is responsible for ensuring that management fulfills its responsibility for financial reporting and is ultimately responsible for reviewing and approving the financial statements. The Board carries out this responsibility principally through its Audit Committee. The Audit Committee is appointed by the Board and meets periodically with management and the members' auditors to review significant accounting, reporting and internal control matters. Following its review of the financial statements and discussions with the auditors, the Audit Committee reports to the Board of Directors prior to its approval of the financial statements. The Committee also considers, for review by the Board and approval by the members, the engagement or re-appointment of the external auditors.

The financial statements have been audited on behalf of the members by NeuPath Group Chartered Professional Accountants, in accordance with Canadian accounting standards for not-for-profit organizations (ASNPO).



Jo Anne Relf-Eckstein, Executive  
Director

Eagle Ridge, SK  
November 17, 2020

**SASKATCHEWAN FORAGE SEED DEVELOPMENT COMMISSION**

**Statement of Financial Position**

**June 30, 2020**

	2020	2019
<b>ASSETS</b>		
Cash	\$ 56,252	\$ 40,781
Term deposits (Note 3)	165,952	175,000
Levies receivable	28,439	29,252
Interest receivable	1,213	2,814
	<b>\$ 251,856</b>	<b>\$ 247,847</b>
<b>LIABILITIES</b>		
Accounts payable and accrued liabilities	\$ 21,316	\$ 32,806
Deferred income (Note 4)	18,647	-
	<b>39,963</b>	<b>32,806</b>
<b>NET ASSETS</b>		
Unrestricted	211,893	215,041
	<b>\$ 251,856</b>	<b>\$ 247,847</b>

**SASKATCHEWAN FORAGE SEED DEVELOPMENT COMMISSION**

**Statement of Changes in Net Assets**

**Year Ended June 30, 2020**

	2020	2019
<b>NET ASSETS - BEGINNING OF YEAR</b>	<b>\$ 215,041</b>	<b>\$ 239,292</b>
Deficiency of revenues over expenses	(3,148)	(24,251)
<b>NET ASSETS - END OF YEAR</b>	<b>\$ 211,893</b>	<b>\$ 215,041</b>

ON BEHALF OF THE BOARD

  
 \_\_\_\_\_ Director

  
 \_\_\_\_\_ Director

**SASKATCHEWAN FORAGE SEED DEVELOPMENT COMMISSION**

**Statement of Revenues and Expenditures**

**Year Ended June 30, 2020**

	Budget 2020	2020	2019
<b>REVENUES</b>			
Levies	\$ 60,000	\$ 87,722	\$ 68,728
Levies refunded	(4,000)	(2,216)	(1,491)
Grants	82,000	15,180	2,135
Interest	3,000	4,051	3,972
Other	-	320	-
	141,000	105,057	73,344
<b>EXPENSES</b>			
Administration	18,000	18,412	15,039
Advertising and promotion	3,450	3,000	914
Annual general meeting	3,331	3,098	3,161
Bank charges	170	286	100
Database management	20,000	399	840
Directors' and officers' liability insurance	1,151	1,151	1,151
Directors' expenses	6,847	5,394	4,694
Directors' meetings	700	442	524
E-News and Forage Seed News	7,700	9,508	6,513
GST	900	810	1,053
Newsletter	2,665	678	506
Postage	100	32	38
Professional fees	3,300	3,492	3,233
Research expenses ( <i>Schedule 1</i> )	122,332	58,127	57,705
Travel	-	581	-
Website design and maintenance	2,000	2,795	2,124
	192,646	108,205	97,595
<b>DEFICIENCY OF REVENUES OVER EXPENSES</b>	\$ (51,646)	\$ (3,148)	\$ (24,251)

**SASKATCHEWAN FORAGE SEED DEVELOPMENT COMMISSION**

**Statement of Cash Flows**

**Year Ended June 30, 2020**

	2020	2019
<b>OPERATING ACTIVITIES</b>		
Deficiency of revenues over expenses	\$ (3,148)	\$ (24,251)
Changes in non-cash working capital:		
Levies receivable	813	(14,469)
Interest receivable	1,600	(779)
Accounts payable and accrued liabilities	(11,489)	29,405
Deferred income	18,647	-
	<b>9,571</b>	<b>14,157</b>
<b>INCREASE (DECREASE) IN CASH FLOW</b>	<b>6,423</b>	<b>(10,094)</b>
Cash - beginning of year	215,781	225,875
<b>CASH - END OF YEAR</b>	<b>\$ 222,204</b>	<b>\$ 215,781</b>
<b>CASH CONSISTS OF:</b>		
Cash	\$ 56,252	\$ 40,781
Term deposits	165,952	175,000
	<b>\$ 222,204</b>	<b>\$ 215,781</b>



**SASKATCHEWAN FORAGE SEED DEVELOPMENT COMMISSION**

**Research expenses (Schedule 1)**

**Year Ended June 30, 2020**

	Budget 2020	2020	2019
Weed Control in Grasses NARF	\$ -	\$ 1,687	\$ 8,545
Weed Control in Legumes NARF	-	11,420	9,686
Plant Growth Regulator NARF	-	850	3,460
Other Research NARF	35,332	1,000	-
Fertility research	-	3,990	9,975
NFC travel/work	2,000	-	-
Weed Control U of S	-	-	5,625
Plant Breeding U of S	3,000	3,000	-
Red Clover Management U of S ADF	7,500	7,500	7,500
Galega U of S ADF	2,500	2,500	2,500
Plains Rough Fescue U of S ADF	1,000	1,000	1,000
Variety demonstration & testing	2,500	12,500	-
Doubled Haploid National Research Council ADF	2,000	2,000	2,000
New ADF	2,000	-	-
Other research	-	-	3,031
Weed Control A Horizon Ag Research	4,500	4,500	-
ADOPT 20160365 Red Alsike in Rotations	-	-	2,048
ADOPT 20160366 Companion Crop -restart	-	-	2,335
ADOPT 20190451 Crimson and Berseem Clover	60,000	5,180	-
ADF - Penner	-	500	-
ADF - Billiget	-	500	-
	\$ 122,332	\$ 58,127	\$ 57,705

1. PURPOSE OF THE COMMISSION

Saskatchewan Forage Seed Development Commission (SFSDC) operates to promote and enhance the forage seed industry in Saskatchewan for a maximum return to producers through research, leadership and communication in the industry.

The SFSDC is a non-profit organization incorporated under the Agri-Food Act, 2004 of Saskatchewan and as such, is not subject to income taxes.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of presentation

The financial statements were prepared in accordance with Canadian accounting standards for not-for-profit organizations (ASNFPO) using the following significant accounting policies:

Cash and cash equivalents

Cash includes cash in chequing and savings accounts. The carrying amounts approximate fair value.

Capital assets

Capital assets are expensed in the year they are acquired.

Financial instruments policy

Financial instruments are recorded at fair value when acquired or issued. In subsequent periods, financial assets with actively traded markets are reported at fair value, with any unrealized gains and losses reported in income. All other financial instruments are reported at amortized cost, and tested for impairment at each reporting date. Transaction costs on the acquisition, sale, or issue of financial instruments are expensed when incurred.

Measurement uncertainty

The preparation of financial statements in conformity with Canadian accounting standards for not-for-profit organizations requires management to make estimates and assumptions that affect the reported amount of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Such estimates are periodically reviewed and any adjustments necessary are reported in earnings in the period in which they become known. Actual results could differ from these estimates.

Revenue recognition

Saskatchewan Forage Seed Development Commission follows the deferral method of accounting for contributions.

Restricted contributions are recognized as revenue in the year in which the related expenses are incurred. Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

Levies are recognized as revenue when received or receivable if the amount can be reasonably estimated and collection is reasonably assured.

Investment income is recognized as revenue when earned.

**SASKATCHEWAN FORAGE SEED DEVELOPMENT COMMISSION**

**Notes to Financial Statements**

**Year Ended June 30, 2020**

3. TERM DEPOSITS

	2020	2019
Credit Union 18 month term, 2.25%, maturing February 15, 2020	\$ -	\$ 125,000
Credit Union 18 month term, 2.50%, maturing September 17, 2020	<b>51,256</b>	50,000
Credit Union 12 month term, 1.25%, maturing June 10, 2021	<b>14,696</b>	-
Credit Union 36 month term, 2.25%, maturing February 18, 2023	<b>100,000</b>	-
	<b>\$ 165,952</b>	\$ 175,000

4. DEFERRED REVENUE

	Balance, Beginning of Year	Add Amount Received	Less Amount Recognized	Balance, End of Year
ADOPT 20190436	\$ -	\$ 14,696	\$ -	\$ 14,696
ADOPT 20190451	-	8,000	5,180	2,820
SFP 20190402	-	11,131	10,000	1,131
	\$ -	\$ 33,827	\$ 15,180	\$ 18,647

5. FINANCIAL INSTRUMENTS

The Commission is exposed to various risks through its financial instruments and has a comprehensive risk management framework to monitor, evaluate and manage these risks. The following analysis provides information about the Commission's risk exposure and concentration as of June 30, 2020.

*(a) Credit risk*

Credit risk arises from the potential that a counter party will fail to perform its obligations. The Commission is exposed to credit risk from forage seed marketers. Approximately 93% of levies are received from three marketers of forage seed. The Commission manages its credit risk by monitoring the activities of marketers and by educating marketers of their legislative requirement to collect and forward levies to the Commission.

The Commission manages its credit risk surrounding cash by dealing with reputable financial institutions. The Commission invests surplus funds to earn investment income with the objective of maintaining safety of the principal and providing adequate liquidity to meet the cash flow requirements.

*(b) Liquidity risk*

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities. The Commission manages its liability risk by monitoring actual and forecasted cash flows from operations and anticipated investing and financing activities.

At June 30, 2020 the Commission has a cash balance of \$56,252 (2019 - \$40,781).

*(continues)*

5. FINANCIAL INSTRUMENTS *(continued)*

*(c) Market risk*

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: currency rate risk, interest rate risk and other price risk. The Commission is mainly exposed to interest rate risk on its term deposits and other price risk associated with forage seed prices.

6. BUDGETED FIGURES

The budgeted figures, approved by the Board on August 7, 2019, are presented for comparative purposes only and have not been audited or reviewed.

SASKATCHEWAN FORAGE SEED DEVELOPMENT COMMISSION  
EXPENDITURE BY PAYEE  
For The Year Ended June 30, 2020

<b><u>Payees Above \$1,000</u></b>	<b>Amount</b>
UofS Crop Sciences	\$ 3,000.00
UofS Research Services	\$ 12,000.00
J. Relf-Eckstein Executive Director salary	\$ 17,183.63
Northeast Agriculture Research Foundation	\$ 46,293.00
MB Forage Seed Forage Seed News magazine	\$ 7,474.32
J. Relf-Eckstein office/meeting administration expenses	\$ 8,134.82
Neupath Group auditor	\$ 3,552.00
Receiver General of Canada ADF	\$ 2,000.00
Levy Refund Producer 1 Deliveries Term 1 2019-2020	\$ 1,348.80
Prairie Orchid website servies	\$ 3,709.32
Peace Region Forage Seed Association	\$ 4,800.00
Hoffmann Kool Director's Insurance July2019	\$ 1,151.16
Praireland Park AGM and Grower Information Meeting January 14 2020 AV, meals, rental room	\$ 1,731.57
ICDC Variety Demonstration Trials	\$ 2,500.00
A Horizon Ag Research	\$ 4,500.00
James Silcox director expenses	\$ 1,253.61
David Cox director expenses	\$ 1,044.94
Morley Doerksen director expenses	\$ 1,037.22
<b><u>Payees Under \$1,000</u></b>	
Amount	\$ 4,332.99

## Executive Director's Report: J. Relf-Eckstein – January 11, 2021

### Programs and Activities 2019-2020

The SFSDC development plan activities for 2019-2020 are represented by three categories: Communications, Research, and Governance. The fiscal year began July 01, 2019 with preparations for a grower information session and field day a few weeks later in mid-July. Field trials were supported by levy funds and co-funded by the Ministry of Agriculture with support from industry sponsors for inputs and technical expertise on products.

### Grower Extension and Knowledge Transfer activities for 2019-2020

1. **The Annual Forage Seed Field Tour and Barbecue** were held at the Agriculture and Agri-Food Canada (AAFC) Research Farm near Melfort, SK, on July 25th, 2019. The SFSDC, the Northeast Agriculture Research Foundation (NARF), and AAFC Melfort hosted the event. Researchers prepared presentations in anticipation of talking with forage seed producers; the field tour route was planned; signs posted in anticipation of the visitors, and the noon meal was arranged by the NARF staff. However, Mother Nature had a different idea and the clouds started building; the winds came up, and the rains began. Touring the field plots was no longer an option. Jessica Pratchler, Research Manager at and the NARF and AAFC staff adapted quickly and our invited speakers had prepared a slide deck of their research just in case we were not able to get to the fields. The 2019 SFSDC event thus became a successful non-field-field day attended by 40 growers, researchers, NARF and AAFC staff. Information was published in the Prairie Seeds newsletter (November 2019 Issue) and Forage Seed News magazine (Fall 2019 and Winter 2020 Issues).

2. **AGM and Grower Information Session** was held on January 14<sup>th</sup>, 2020, Hall E Prairieland Park, Saskatoon, SK. The event was attended by 44 people. Speakers included:

- Joseph Robins, Research Geneticist, Forage and Range Research Laboratory United States Department of Agriculture - Agriculture Research Services (USDA-ARS), Logan, Utah. [Overview forage and range research USDA](#)
- Bill Biligetu, Ministry of Agriculture Strategic Research Program Chair in Forage Crop Breeding, University of Saskatchewan. [Forage Breeding at UofS](#).
- Lorne Hadley, Executive Director, Canadian Plant Technology Agency. [Value Creation System Proposed Concept Overview](#).
- Taryn Heidecker, A Horizon Ag Research: [2019 Perennial Ryegrass and Slender Wheatgrass Seedling Research](#).
- Brianne McInnes, Northeast Agriculture Research Foundation (NARF): 2019 [Forage Seed Research NARF: Red & Alsike Clover, Annual Ryegrass, Effects of forage seed crops in rotation: Red Clover/Clearfield™ Canola and Alsike Clover/Clearfield™ \(2017\), Red and Alsike Clover and Peas \(2018\) and Spring Wheat \(2019\) ADOPT 20160365, project final report](#).
- Danielle Stephens, Research Specialist Agronomy, Ag Research Branch, Sask Ministry of Agriculture. [The Ag Development Fund program](#).
- Alison Ferrie, National Research Council: ADF 20180351 project update. [Developing doubled haploid methodology in forages](#).
- Dan Malamura University of Saskatchewan: [Integrated Pest Management to Optimize Red Clover Seed Production](#), ADF 2017007 project update.
- Anders Mondrup, Head of Field Production, DLF Seed & Science, Denmark, [Global market and European forage seed production perspectives](#).
- Terry Kowalchuk, Provincial Forage Crop Specialist, Saskatchewan Agriculture [Forage Seed Market Review](#).

**3. Publishing information** about SFSDC events and research results. Two editions of the Prairie Seeds Newsletter (July 2019 and November 2019) were mailed to 250 levy-payers. Electronic copies are posted on the SFSDC website. A series of articles were written by SFSDC for the Forage Seed News (FSN) magazine, published three times each year by the Manitoba Forage Seed Association. The SFSDC purchases and mails the magazine to registered forage seed producers who contributed the levy in the past two years. SFSDC provides financial support for the preparation of the market articles published in the magazine, and the information is presented at our AGM. SFSDC provides sponsorship and contributes articles to the Saskatchewan Forage Council's (SFC) monthly email update, eNews. The June 2020 eNews featured information about the ADOPT project, 20190451.

**4. Promoting forage seed production and market development.** SFSDC supported the Livestock and Forage Centre of Excellence (LFCE) Annual Field Day, June 2019. SFSDC participated in A Meeting of Minds Workshop, held on February 11, 2020 and organized by AgWest BioTech for commodity organizations to meet with researchers. The SFSDC website is the primary means of general promotion. <https://www.skforageseeddc.com/> received 57,917 hits between February 6, 2018 and August 20, 2020. The Board of Directors and Annual Reports are the most read topic, 16% and 12% of view, respectively. Other categories include Past Research Reports (8%) and News and Current Research Reports (7%). Levy, Production, Prairie Seeds Newsletter, About Us, and Marketing, each received approximately 6% of website traffic. A list of registered forage seed buyers and their contact information was added to the website.

**5. Stakeholder and government relationships.** On August 2<sup>nd</sup> SFSDC responded to the Minister of Trade and Export Development request for stakeholder feedback on Saskatchewan's next plan for growth. SFSDC attended the Forage Crops Advisory Meeting, November 2019, the Beef Research Conference on February 24<sup>th</sup>, 2020, and the Canadian Forage Seed Conference (see insert below) organized by the Peace Region Forage Seed Association.

Canadian Forage Seed Conference, February 25 & 26, Edmonton, AB.

One of the outcomes of the conference was that forage seed organizations in the three provinces are committed to collaboration and "*moving forage seed-forward.*" Why? Well, to start with, we heard at the Conference, concerns from producers - the forage seed industry is 'holding its own but not growing,' and as a rough estimate, the market is proportionately 80% exports 20% domestic. In times of grain sitting in bins waiting for calls to ship to export markets, growing the domestic market is one area of going beyond 'holding our own'.

Next, the capacity to do-more is here, and the human knowledge base, resources of land, and infrastructure, involves producers and organizations in AB, SK, MB, QB, ON, Atlantic Canada, as well as industry specialists and researchers in the Canada and the United States.

Third, the levy from each individual forage seed organization is not enough to have a major impact on advancing the forage seed industry. Yet, by using a portion of the levy from each organization and pooling the funds, producer dollars can be leveraged to apply for grants towards supporting projects of mutual benefit to forage seed producers throughout the Prairie and Peace Region.

Lastly, there is a great opportunity for collaboration across the forage seed and feed industry – forage seed is the start of a major value chain. According to the 2016 Census, the Prairie Provinces account for 78% of Canada's 'forage seed for seed farms', 89% of forage seed acres, and 32% of total forage acres. In Saskatchewan alone, tame hay crops are grown on about 3 million acres (Larson, 2014), and there are more than 11,000 cattle farms or ranches over the province (Possberg, 2020). The economic story of the forage seed to feed and turfgrass is indeed compelling. Going forward, we can ask, what research do we need to do more than 'hold our own' while keeping an eye on profitability per acre of forage seed production? How can we promote forage seed crops as a crop management tool to break disease cycles in monocrop rotations and improve soil health? What are the drivers for forage seed varieties that meet the needs of our growers and the nutritional needs of our end use-customers (e.g., cows)? How might we improve the production side and meet the demand for turfgrass species?

These are just a few examples of questions pondered during coffee breaks, before, and after, the Conference, setting the stage for the next cycle of strategic planning for the organizations.

## Research and Development activities for 2019-2020

### 1. Contract agronomic field research services

The **Northeast Agriculture Research Foundation** (NARF) field trials in 2019 were conducted by Jessica Pratcher and Brianne McInnes at the Melfort location of the Agri ARM network of testing locations. Field trials included minor use product evaluations on red and alsike clover, annual ryegrass, and fertility studies. A three-year trial studying the effect of red and alsike clover in rotation with canola, peas and wheat was completed. This project 20160365, was funded by the ADOPT program.

**A Horizon Ag Research Ltd** planted two trials in 2019, slender wheatgrass and perennial ryegrass, for evaluation of potential minor use pesticides for weed control and regulating plant growth. Michael Steckler and Taryn Heidecker presented their first-year research trial results at last year's AGM. SFSDC is grateful for the efforts made by Michael and his team in 2020. The perennial ryegrass trial was discontinued due to winterkill. The effect of plant growth regulator was tested on **slender wheatgrass** and the results were used in support of data packages supporting minor use registration.

*Results for SFSDC funded projects are posted on our website*

*<https://www.skforageseeddc.com/research/current-research.html> Results for projects co-funded by SFSDC through government programs are available at <http://www.agriculture.gov.sk.ca/ADF/search>*

### 2. Co-funding multi-year forage seed crop research projects

The SFSDC participated in the industry stakeholder discussions and co-funded direct basic and applied research using the Ministry of Agriculture, **Agriculture Development Fund** (ADF).

New projects were selected, two were completed, and three projects are in their second year. One project, Investigating the role of copper fertility in ergot infestation of forage crops, ADF #20190322, was deferred from planned start in spring 2020, and will be initiated next year.

Researchers completed two ADF projects this year. The ADF 20150186 project, *Breeding New Sainfoin Lines with Improved Forage Characteristics and Persistence in Saskatchewan*, is led by Dr. Bill Biligetu, University of Saskatchewan.

The **sainfoin** project results were summarized and presented in the winter 2021 issue of the Forage Seed News magazine. A scientific publication, *Assessment of sainfoin (*Onobrychis viciifolia* Scop.) germplasm, for agro-morphological traits and nutritive value*, is available for download or on request to Dr. Biligetu. For more information about sainfoin, see Sheppard, S.C., Cattani, D.J., Ominski, K.H., Biligetu, B., Bittman, S. and McGeough, E.J., 2019. *Sainfoin production in western Canada: A review of agronomic potential and environmental benefits*. Grass and Forage Science, 74(1).6-18.

The second completed project, ADF 20170007, *Integrated Management Approach to Optimize Red Clover Seed Production in Saskatchewan*, featured research on the **lesser clover leaf weevil**. The work was done graduate student, Dan Malamura and entomologist, Dr. Sean Prager, University of Saskatchewan. A summary of the project was published in the fall 2020 issue of Prairie Seeds Newsletter. The first peer-reviewed scientific publication, *Assessing chemical control options and their effects on the lesser clover leaf weevil (*Hypera nigrostris*) and red clover pollinators in Western Canada*, is available for download or on request to Dr. Prager.

Ongoing 3-year ADF projects include: a project on **plains rough fescue**, ADF 20180173, *Enhancing seed and biomass production and drought tolerance of plains rough fescue using novel seed treatments*, led by Dr. Bai, University of Saskatchewan, and research on **galega**, a new forage legume crop,

**Fund contract research - \$23.5 K levy**  
– field trials on minor use pesticide and plant growth regulators field trials.

- Northeast Agricultural Research Foundation (NARF)
  - 8 projects in 2019
  - 4 in 2020
- A Horizon Ag Research Ltd:
  - 2 projects 2019
  - 1 in 2020

**Co-fund basic and applied multi-year ADF research projects - \$14 K levy** - projects valued at \$1.727 M.



*Evaluation of forage Galega (Galega orientalis LAM.) as a new forage legume in pure and grass- legume mixed stands* ADF 20180184, led by Dr. Biligetu, UofS).

A 4-year project, ADF 20180351, *Developing doubled haploidy methodology forage grasses* was started in 2019 and it aims to develop technology to accelerate forage crop breeding and preliminary findings presented at the January 2020 AGM. The project is led by Dr. Ferrie, NRC (see last issue of FSN for project report).

New ADF projects co-funded by the Commission were started in 2020 are **bromegrass improvement**, led by Dr. Greg Penner, University of Saskatchewan - *Developing hybrid bromegrass with improved neutral detergent fibre digestibility*, ADF20190197, and **meadow brome** and **cicer milkvetch** led by Dr. Bill Biligetu, University of Saskatchewan, *Development of meadow brome and cicer milkvetch varieties for stockpiled grazing in western Canada* (ADF 20190244.).

Despite the challenges of COVID-19 restrictions on access to facilities and related health and safety protocols, Drs Penner and Biligetu began work their projects. Plant samples collected from the hybrid bromegrass nursery were analyzed for digestibility (NDF-Neutral Detergent Fibre content). Plants were scored for vigour, hay, and regrowth; the process will be repeated in 2021 to identify the top genotypes. High and low NDF breeding lines and standard (check) varieties planted in 2019 were sampled in 2020. Plants were collected at stem elongation, heading, and flowering stages and will be analyzed for ADF, NDF, and crude protein. Yield data were collected and analysis underway. Dr. Biligetu's student, David MacTaggart, prepared an article for the fall issue of Prairie Seed News providing excellent information about his research in the meadow brome and cicer milkvetch nurseries at the Livestock Centre of Excellence, Clavet, SK.

**3. Demonstrating new technology.** The Commission was awarded funds to administer two ADOPT projects in 2019-2020. The activities were a collaborative venture, partial funding was contributed by the Government of Saskatchewan and the Government of Canada under the Canadian Agricultural Partnership.” SFSDC used the funds to demonstrate production of a new type of forage seed crop, annual clovers.

ADOPT 20190451, *Seed production viability of crimson clover and berseem clover grown under irrigation in Saskatchewan.*, was done at the Irrigation Crop and Diversification Centre at Outlook, SK. The project had a delayed start in spring, 2020. The final report will be posted on the SFSDC website. A second ADOPT project was deferred until 2021, ADOPT 20190436, *Demonstration of night spraying technology for control of lesser clover leaf weevil, Hypera nigrirostris (Fabricius) in single cut red clover, Trifolium pratense L. grown for seed production in Saskatchewan.* The project aim was to demonstrate night spraying of the lesser clover leaf weevil, now believed to have a nocturnal habit during adult mating season.

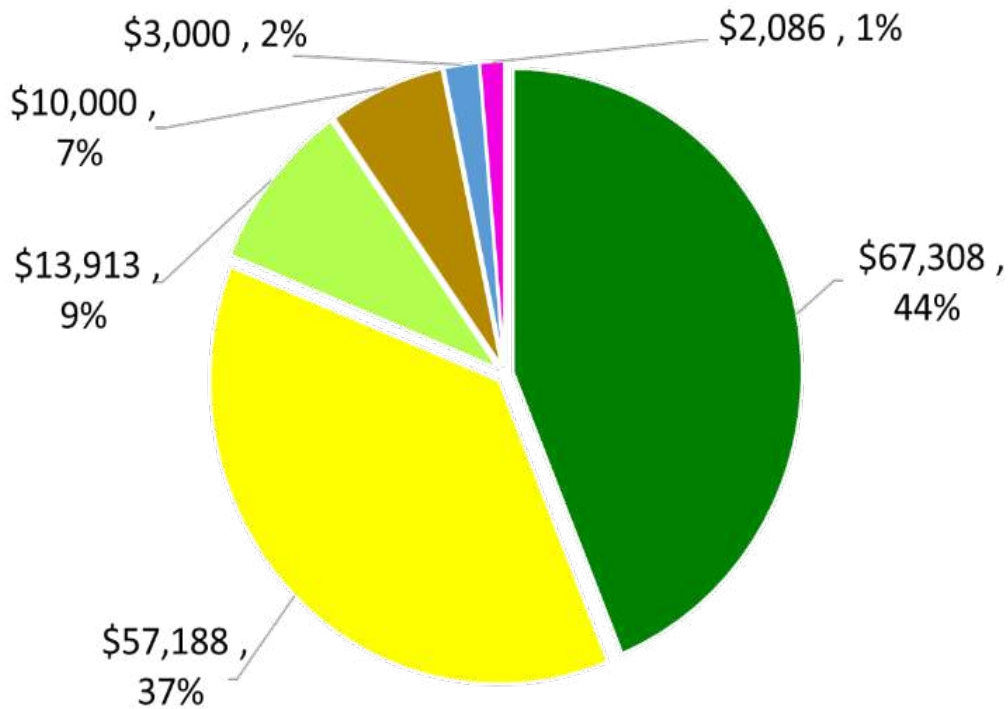
### Governance activities 2019-2020

The *Agri-Food Act* and the associated Regulations and Board Orders prescribe SFSDC governance activities. In 2019-2020, the following five areas were done.

- 1. Organizing the Annual General Meeting** (January 14, 2010) for levy-paying producers and providing information about the SFSDC activities and use of levy funds. Attendance at the AGM was 44 people, however, there were only 9 registered forage seed producers present, falling short of quorum of 15 registered producers.
- 2.** The SFSDC Board of Directors held **five Board Meetings** during the 2019-2020 fiscal year (June, July August and November 2019, and January 2020). A special teleconference meeting in March discussed 2020 Research projects. An e-vote was done on June 15, 2020 to approve the amended research budget given the COVID-19 situation.
- 3. Working with the Agri-Food Council** to update the 2015 SFSDC Regulations and Board Orders.
- 4. Maintaining the SFSDC Grower Database**, collecting information and levy funds from forage seed buyers and issuing levy refunds as required and **providing information** for financial audit.
- 5. Providing governance documentation** to levy-payers including AGM Minutes, Audited Financial Statement, the Annual Report. Growers receive governance information in the Prairie Seeds Newsletter, mailed to each levy payer.

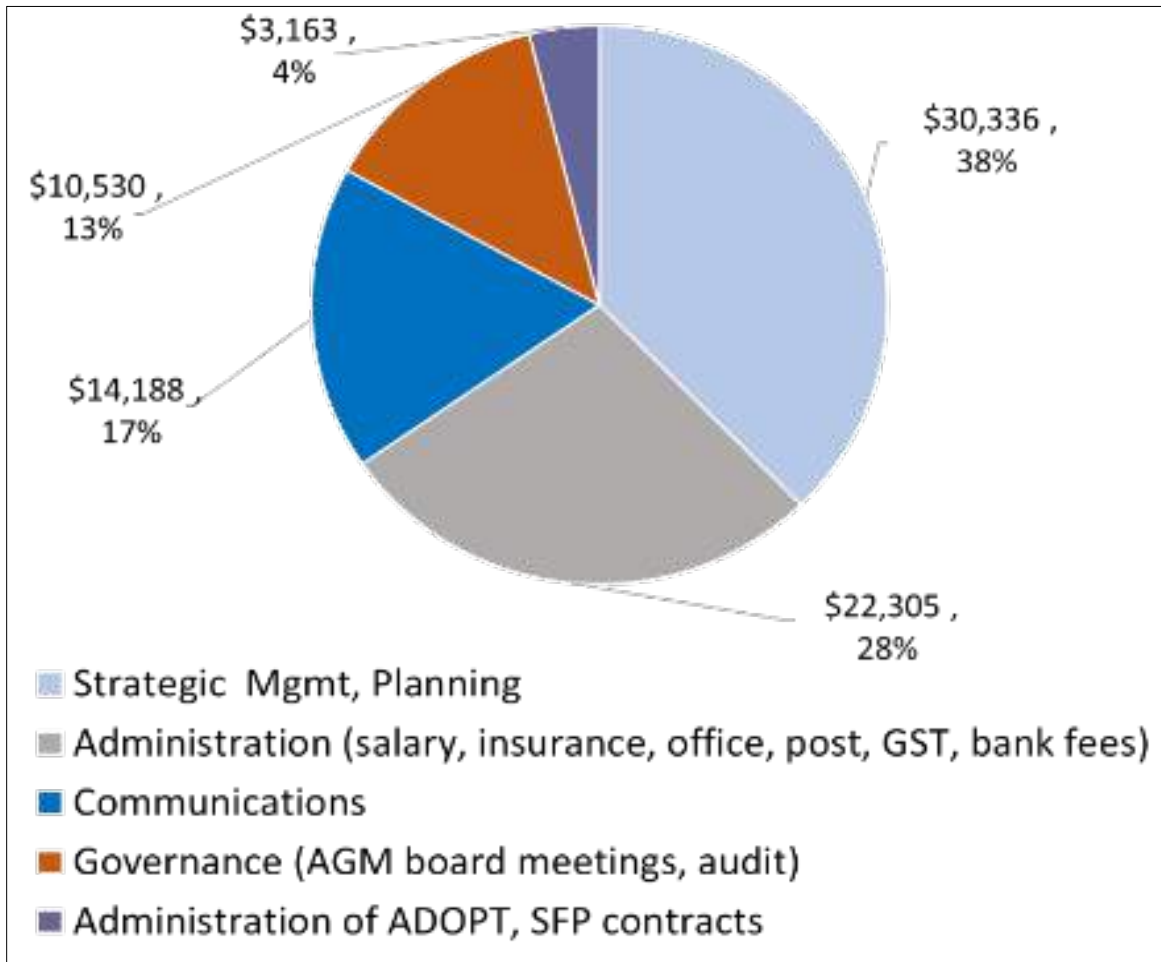
Budget fiscal year, July 01, 2020 to June 30, 2021

INCOME	DETAILS	VALUE
<b>Projected Revenues</b>		
levy income		70,000.00
levy refunds		(-2,692.35)
other income	Research ADOPT 20190436 and 451 deferred from 2019	28,370.00
	ADOPT - New projects (application Nov 22/2020)	28,818.00
	SK Ag Strategic Planning CAP (application Jan 15/2021)	10,000.00
	Strategic Field Program SFP 20190402	13,913.00
	Interest	3,000.00
	Refund Forage Seed Network membership	2,086.20
<b>TOTAL INCOME</b>		<b>\$153,494.85</b>



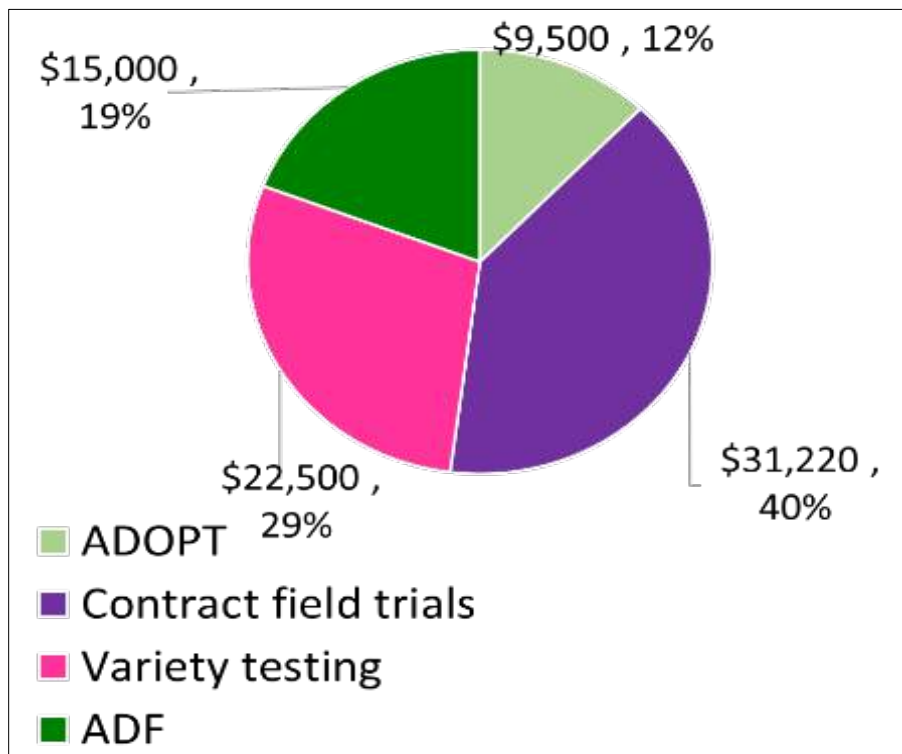
**Budget fiscal year, July 01, 2020 to June 30, 2021**

<b>EXPENDITURES</b>	<b>DETAILS</b>	<b>VALUE</b>
<b>Administration</b>	<b>Salary time 40 hrs/month</b>	<b>15,600.00</b>
	Office expenses	4,500.00
	Strategic Plan	30,335.63
Directors & Officers Liability Insurance		1,200.00
Director Meetings (rentals, coffee/meals)		400.00
Promotion / Advertising		2,350.00
Annual General Meeting/Workshop, Field Tours		3,000.00
Bank Charges		125.00
Administer contracts, invoices, payments for		3,163.00
Director Expenses		3,450.00
Website Maintenance, Hosting and analytics		2,838.00
Newsletter 2X/yr. (250 copies, 16 pg booklet, b/w)		1,000.00
Postage / Freight (not otherwise in office admin)		30.00
Auditor		3,500.00
eNews / Forage Seed News		8,000.00
Travel (conferences)		0
GST Paid		850.00
<b><i>Subtotal Expenditures (non-Research)</i></b>		<b><i>\$ 80,5212.63</i></b>



**Budget fiscal year, July 01, 2020 to June 30, 2021**

<b>EXPENDITURES</b>	<b>DETAILS</b>	<b>VALUE</b>
<b>Research</b>		
Weed Control in Grasses	NARF 20-103	450.00
Weed Control /Minor Use in Legumes	NARF 20-101,20-102	2,320.00
Establishment of next year plots	NARF 20-104, 200-105	200.00
Plant Growth Regulator/Minor Use (Grasses) A Horizon Ag Research		2,250.00
	A Horizon Ag New projects	6,000.00
	NARF New projects	20,000.00
<b><i>Contract Research</i></b>		<b><i>31,222.00</i></b>
Variety Demonstration & Testing SFSDC contribution		2,500.00
Strategic Field Program	SFP 20190402	13,913.00
<b><i>Forage Seed Variety Trials</i></b>		<b><i>16,413.00</i></b>
U of S ADF Project on Galega	ADF 20180184	2,500.00
U of S ADF Project on Plains Fescue	ADF 20180173	1,000.00
NRC ADF Project Doubled Haploid in Forage Grasses	ADF 20180351	2,000.00
U of S ADF Project on Bromegrass improvement	ADF 20190197	500.00
U of S ADF Project on meadow brome and cicer milkvetch varietal development	ADF 20190244	500.00
AAFC ADF Project Copper fertility in ergot infestation	ADF 20190322	1,000.00
ADF projects	New projects	7,500.00
<b><i>ADF projects</i></b>		<b><i>15,000.00</i></b>
Annual clover seed production demo under irrigation (night spraying technology for lesser clover leaf weevil)	ADOPT 20190451	9,500.00
ADOPT applications November 22/2022	ADOPT 20190436	17,870.00
	New projects	28,188.00
<b><i>ADOPT projects</i></b>		<b><i>55,580.00</i></b>
<b>Subtotal Expenditures (Research)</b>		<b>\$118,191.00</b>
<b>Subtotal Expenditures (non-Research)</b>		<b>\$80,521.63</b>
<b>TOTAL EXPENSES</b>		<b>\$198,712.63</b>



## Vice Chair Report Spencer Staffen, January 11, 2021

### Planned Programs and Activities for 2020-2021

#### Grower Extension and Knowledge Transfer activities for 2020-2021

1. **Coordinating the Forage Seed Field Tour** and Barbecue at Melfort – July 2020. CANCELLED DUE TO THE COVID-19 pandemic.
2. **Publishing research results and industry communications.** Two issues of *Prairie Seeds Newsletter* (June and November) will be published. SFSDC will provide financial support and prepare articles for the *Forage Seed News* magazine (Spring, Fall, and Winter issues) published by Manitoba Forage Seed Association and mail a copy to current levy payers, SK processors and research scientists receiving funding from SFSDC. Prepare articles and financially support the Saskatchewan Forage Council *eNews* –email newsletter. Other articles will be prepared as requested.
3. **Hosting the Forage Seed Grower Information Session** – January 2020 and supporting the Saskatchewan Forage Seed Variety Demonstration Program. CANCELLED DUE TO THE COVID-19 pandemic. Planning for summer 2020 field tours will be dependent on the pandemic situation.
4. **Sponsoring** and attending the first Canadian Forage Seed Conference, February 2020.
5. **Identifying new technologies** for forage seed producers and applying to the ADOPT program. Three applications were submitted November 2020.
6. **Maintaining an on-line presence** and accurate and up to date sources of information through the SFSDC website and social media forums.

#### Research and Development activities planned for 2020-2021

1. **Continuing to contract forage seed research trials**, including, but not limited to field trials at NARF, Melfort, SK. and A Horizon Ag Research Ltd. General areas of research include evaluating minor use pesticides and plant growth regulators, seeding rates and fertility studies. Two trials were planted at NARF in anticipation of 2021 field trials red and alsike clover and companion cropping of canola with turf-type perennial ryegrass.
2. **Evaluating new research proposals with industry stakeholders and providing co-funding** for multi-year research projects submitted by researchers through the ADF grant intake.

Two projects were selected by SFSDC, ADF 20200420, *Identifying New Diversity and Developing Genomic Resources for Bromegrass (Bromus Spp.) Forage Crop Breeding*, Principal Investigator Dr. Andrew Sharpe, Global Institute for Food Security. The ADF Funding is \$331,869, with co-funding by the Saskatchewan Forage Seed Development Commission and Saskatchewan Cattlemen's Association.

A second project selected by SFSDC through the ADF project intake, is co-funded by the Saskatchewan Forage Seed Development Commission, Alberta Wheat, Sask Wheat, and the Manitoba Crop Alliance. The funding of \$196,000 will support activities of the Resistant Wild Oat Action Committee (RWOAC).

3. **Preparing submissions for ADOPT technology demonstrations** based on grower and industry priorities for projects. Three applications submitted November 22, 2020. SFSDC will administer 2019 projects and initiate demonstration for the 2019 ADOPT project.
4. **Coordinating minor use pesticide trials** with Manitoba and Peace Region forage seed associations to fund minor use pesticide field trials and coordinate efforts for data collection and supporting data submissions to the Pest Management Regulatory Agency (PMRA).

## Research and Development activities planned for 2020-2021 (continued from previous page)

5. **Supporting evaluation of forage seed varieties.** An application was made to establish new locations for assessing forage seed varieties, a dryland site at the LFCE, Clavet, SK and an irrigated site at Outlook. The application was submitted through the Ministries Strategic Field Program and supported. SFSDS is sponsoring and administering the multi-year project for evaluating 28 breeding lines and commercial forage seed grass and legume varieties. The objectives of the project are to assess seed yield for the common grass seed crops grown in Saskatchewan; evaluate grass seed as a possible irrigated cash crop as a means of expanding the sector; explore potential turf grass varieties as a possible diversification opportunity for the forage seed sector and enable Dr Biligetu, research chair for forage breeding, to evaluate seed production of new lines and compare to current commercial varieties.
6. **Identifying organic forage seed production issues** and working with Sask Organics to support field research projects.

## Governance activities for 2020-2021

1. **Organizing the Annual General Meeting**, January 11, 2021, SFSDC's first virtual AGM.
2. **Succession planning** to find new board member(s) to fill vacancy and elect new executive for remainder of 2020-2021 fiscal year.
3. **Completing policy amendments** to the SFSDC Regulations and Board Orders and update internal policy document accordingly.
4. **Developing new Strategic Plan** by firstly submitting grant application in support of funding for developing next Strategic Plan. An application was submitted February 2020 and supported through the Industry Organization Development Fund. Next steps will be information-seeking activities by interviewing growers and industry stakeholders.
5. **Maintaining the SFSDC Grower Database**, collecting information and levy funds from forage seed buyers and issuing levy refunds as required and providing information for financial audit.
6. **Supporting growers** and ensuring transparency in SFSDC activities including providing timely and accurate information for growers contacting the SFSDC office with questions or concerns, preparing and distributing governance documentation to levy-payers including AGM Minutes, Audited Financial Statement, the Annual Report. Ensure growers receive governance information in the Prairie Seeds Newsletter, mailed to each levy payer.
7. **Administering and reporting** for grant-funding research including the ADOPT technology demonstration projects and the Strategic Field Program.

## Market/Product Development and Promotion Activities

1. **Identifying export market development** by working with Saskatchewan Trade and Economic Partnership (STEP). Membership in STEP will assist SFSDC to do research that will identify export market opportunities for organic and conventional forage seed crops, with an initial look at market potential for the ryegrasses.
2. **Providing input on pest problems** to the Saskatchewan Integrated Pest Management Agrologist, and Agriculture and Agri-Food Canada minor use priority program and work with MB and AB forage seed organizations to identify minor use product gaps and coordinate testing across the three provinces.
3. **Attending the National Minor Use Prioritization** virtual meetings, February 2021, coordinate with AAFC-Pest Management to secure contractors for minor use trials in forage seed, coordinate with AB, MB and BC forage seed groups to identify and prioritize product-crop gaps and conduct trials as required.
4. **Engaging with organizations** with common interest in advancing the forage seed to feed value chain, forage seed crop diversification alternatives and market expansion for Saskatchewan producers.
5. **Compiling and contributing data** on Saskatchewan forage seed delivery statistics for aggregation with other provinces.
6. **Supporting evaluation of forage seed varieties.** In 2020, SFSDC became administrator for a four-year project supported by the Saskatchewan Agriculture Ministry, Strategic Field Program, co-funded by SFSDC (\$10,000/4 years) and the government of Saskatchewan through the Canadian Agriculture Partnership, as part of the bilateral agreement, *A Bilateral Agreement to Implement the Canadian Agricultural Partnership: A Federal-Provincial-Territorial Agreement on Agriculture, Agri-Food and Agri-Based Products Policy*. The University of Saskatchewan provides in-kind contribution of \$63,000/4 years.

Project funding of \$13,912 per year will be used to plant and maintain a dryland site at the Livestock and Forage Centre of Excellence (LFCE), Saskatoon (Clavet, SK) and an irrigated site at the Irrigation Crop Diversification Corporation (ICDC) at the ICDC Knapik off station location near Outlook, SK. Five varieties of hybrid bromegrass were planted in spring 2020; hybrid wheatgrass (3 varieties), 2 varieties each of: meadow bromegrass, crested wheatgrass, intermediate wheatgrass, tall fescue, timothy, sainfoin, and one variety each of western wheatgrass, northern wheatgrass, smooth bromegrass, creeping red fescue, perennial ryegrass, cicer milkvetch, festolium and galega.



## Celebrating 15 years and Looking Forward

The Saskatchewan Forage Seed Development Commission (SFSDC) is a not-for-profit organization incorporated under the Agri-Food Act, 2004. Under existing legislation, financial statements are prepared and audited by a third party in compliance with Canadian generally accepted accounting principles. The SFSDC Development Plan uses the forage seed levy to support the development and introduction of new varieties, conduct agronomic research, transfer knowledge to growers and develop new market opportunities.

Forage seed producers registered with the Commission serve on the Board of Directors. Advisory Committee members represent government, forage buyers and processors and forage industry groups.

One part-time Executive Director is responsible for implementing board policies and procedures; developing strategic alliances; ensuring management efficiency of the SFSDC office, Board organization, governance, financing, and accounting; reporting to growers and seeking additional funding for applied research and technology transfer projects. Four Executive Directors have worked for SFSDC: Phil Curry (2005-2006), Nancy Johns, nee Gray, 2006-2007 to 2011. Ray McVicar, 2011-2012 to March 2019, and J. Relf-Eckstein, March 2019 to current.

The AgriFood Council, the oversight/supervisory body, provides support for governance and keeping Regulations and Board Orders relevant for the organization and up to date with changes to the *Agri-Food Act*.

In the first year, 2005-2006, 380 producers registered with SFSDC and the total value of deliveries reported to SFSDC by eight active buyers and processors of forage seed was CA\$5M.

In 2005-06, about \$41,000 levy was collected on all: forage grasses, forage legumes (except alfalfa seed), and turf and amenity, and reclamation species, inclusive of all grades of forage seed and all potential mixtures. Deliveries comprised 25 different grass and legume species. Red clover was the highest value crop grown by the most producers, followed by annual and perennial ryegrass and crested wheatgrass.

At the first Annual General Meeting (AGM) in December 2006, proposed activities for SFSDC using the levy ranged from doing research studying: better pest control (weeds, insect, disease), fertility management and the use of cover crops to help forage seed crop establishment, improving harvest methods (swath, straight cut, use of desiccants), supporting data collection for minor use product registrations, and networking with Manitoba and Peace Region forage seed grower associations.

By March 2007, SFSDC actively pursued partnering with research institutions to complete any research identified as a priority for growers. Field research done in the Black Soil Zone of northeastern Saskatchewan is most desirable, however, it is recognized that institutions with capacity to conduct forage seed research are often located outside the target geographies and ecozones.

*The forage seed levy is collected by the Saskatchewan Forage Seed Development Commission represents a broad diversity of forage seed crops (see Table 2 below).*

*The total annual and average value of deliveries levy deductions (refunds requested) and the number of growers in the last fifteen years of SFSDC operations are listed in Table 3. When aggregated over the last 15 years, forage seed growers contributed approximately \$760,000 levy.*



Table 2: Common name of the forage seed crops for which levy has been collected by the Saskatchewan Forage Seed Development Commission, 2005-06 to 2019-20.<sup>1</sup>

Birdsfoot trefoil	Canada bluegrass	Awned wheatgrass
Black medic	Fowl bluegrass	Crested wheatgrass
	Kentucky bluegrass	Hybrid wheatgrass
Alsike clover	Sanberg bluegrass	Intermediate wheatgrass
Red clover		Northern wheatgrass
Sweet clover	Hybrid bromegrass	Pubescent wheatgrass
	Meadow bromegrass	Slender wheatgrass
American Vetch	Smooth bromegrass	Streambank wheatgrass
Cicer milkvetch	Mountain bromegrass	Tall wheatgrass
		Western wheatgrass
Sainfoin	Annual ryegrass	
	Hybrid ryegrass	Altai wildrye grass
Chewing's fescue	Perennial ryegrass	Canada wildrye grass
Creeping red fescue		Dahurian wildrye grass
Hard fescue	Timothy	Russian wildrye grass
Meadow fescue		
Sheep fescue	Red top	Green Needle Grass
Tall fescue	Reed canarygrass	Needle-and-Thread

<sup>1</sup>All forage seed crops except alfalfa seed.

Table 3: Saskatchewan forage seed crops with levy deductions used by Saskatchewan Forage Seed Development Commission to fund activities 2005-06 to 2019-20.

Revenue	Total Value Seed Deliveries	Levy Funds Collected	Less Levy Refund	Producers Contributing Levy	Levy Total
<b>2019-2020</b>	\$ 11,977,362	\$ 87,682	<b>-\$2,216</b>	184	<b>\$85,466</b>
<b>2018-2019</b>	\$ 9,146,184	\$ 68,728	<b>-\$1,491</b>	175	<b>\$67,219</b>
<b>2017-2018</b>	\$ 9,840,148	\$ 73,807	<b>-\$4,096</b>	204	<b>\$69,711</b>
<b>2016-2017</b>	\$ 8,067,578	\$ 60,340	<b>-\$1,624</b>	176	<b>\$58,716</b>
<b>2015-2016</b>	\$ 13,859,419	\$ 103,946	<b>-\$6,472</b>	203	<b>\$97,474</b>
<b>2014-2015</b>	\$ 6,576,072	\$ 49,340	<b>-\$348</b>	162	<b>\$48,922</b>
<b>2013-2014</b>	\$ 7,973,452	\$ 59,801	<b>-\$2,870</b>	177	<b>\$56,931</b>
<b>2012-2013</b>	\$ 5,127,733	\$ 38,458	<b>-\$2,521</b>	154	<b>\$35,937</b>
<b>*2011-2012</b>	\$ 6,175,733	\$ 46,318	<b>-\$64</b>	175	<b>\$46,254</b>
<b>2010-2011</b>	\$ 4,647,200	\$ 34,854	<b>-\$365</b>	138	<b>\$34,489</b>
<b>2009-2010</b>	\$ 5,672,400	\$ 42,543	<b>-\$768</b>	149	<b>\$41,775</b>
<b>2008-2009</b>	\$ 5,212,400	\$ 39,093	<b>-\$850</b>	229	<b>\$38,243</b>
<b>2007-2008</b>	\$ 7,762,000	\$ 58,215	<b>-\$1,308</b>	313	<b>\$56,907</b>
<b>2006-2007</b>	\$ 7,604,667	\$ 57,035	<b>-\$6,121</b>	322	<b>\$50,914</b>
<b>2005-2006</b>	\$ 5,460,000	\$ 40,950	<b>-\$1,999</b>	380	<b>\$38,951</b>
<b>15-Year average</b>	<b>\$ 7,673,490</b>	<b>\$ 57,407</b>	<b>-\$2,208</b>	<b>209</b>	<b>\$55,194</b>
<i>*levy refunds of (230.81) less \$294.81 adjustment from 2010-2011</i>					

Forage seed deliveries reported to the Commission total approximately 58 M kg seed with a farm gate value of \$101.3 M. Figures 1, 2 and 3 illustrate the trend of deliveries based on volume and value of the different forage seed crops when classified into broad groups.

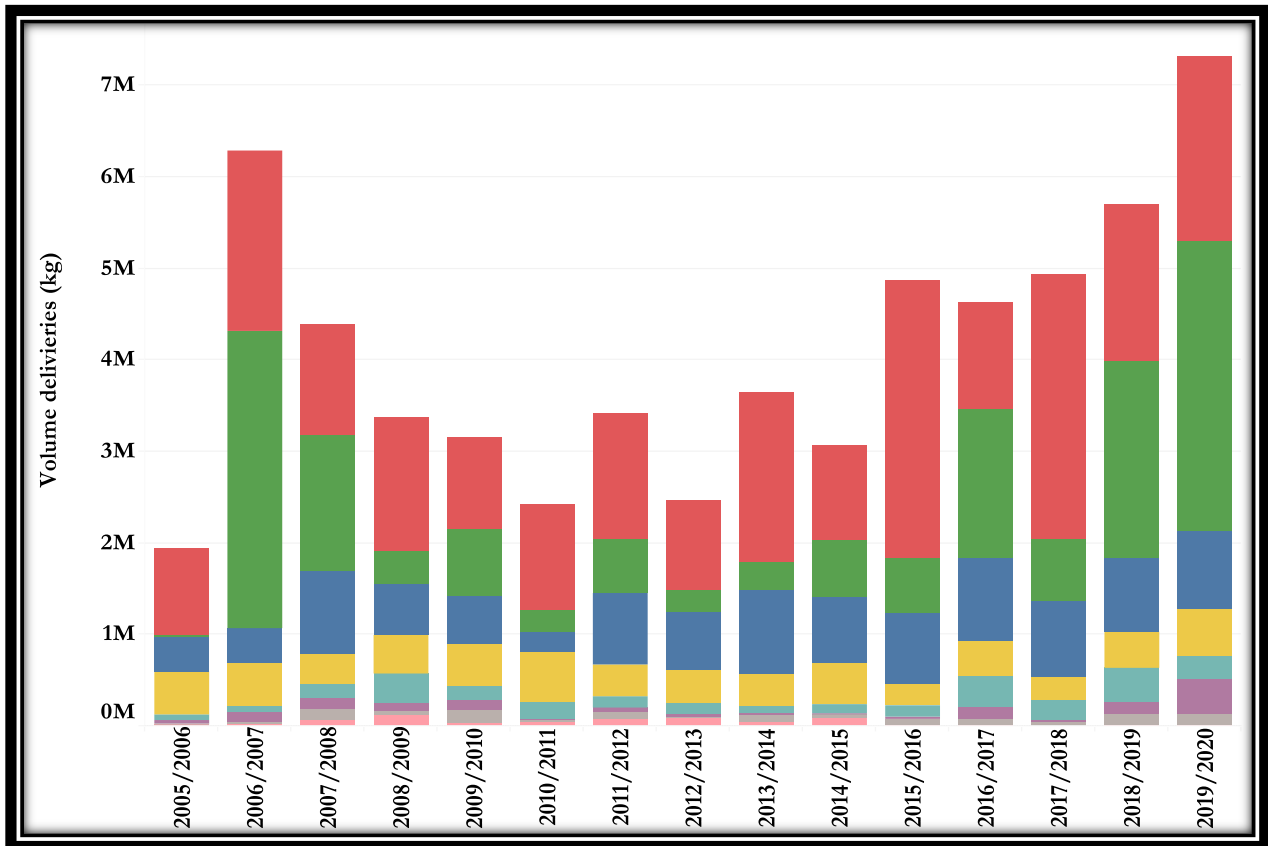


Figure 1: Volume of Saskatchewan forage seed deliveries reported to by Saskatchewan Forage Seed Development Commission, grouped by type, 2005/06 to 2019/2020.

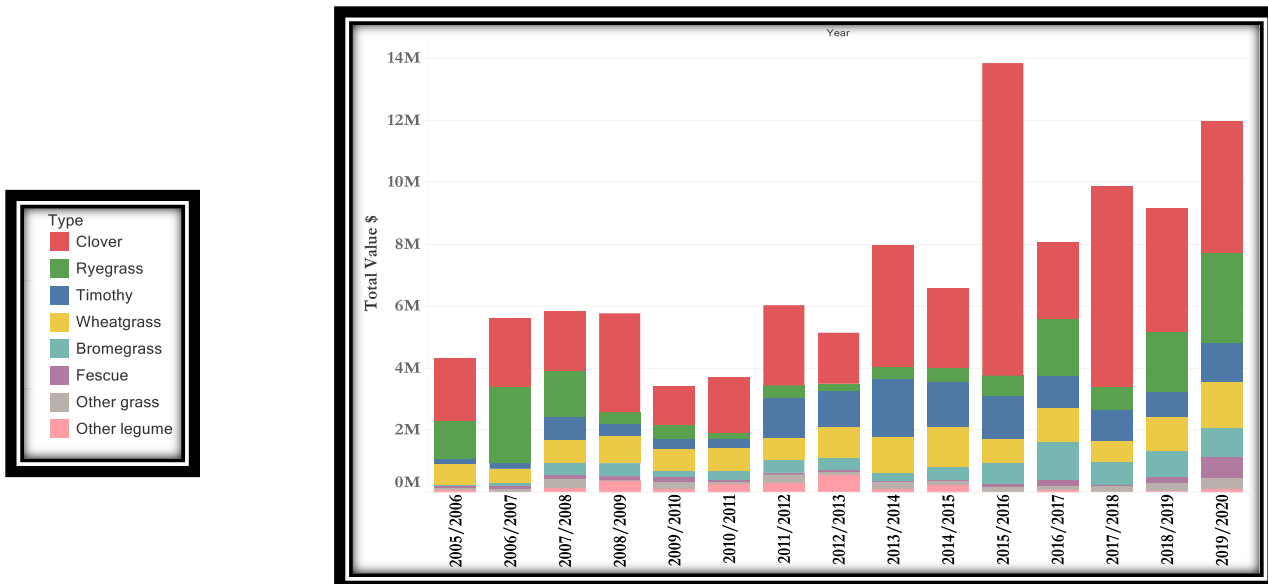


Figure 2: Value of Saskatchewan forage seed deliveries by type, 2005/06 to 2019/2020.

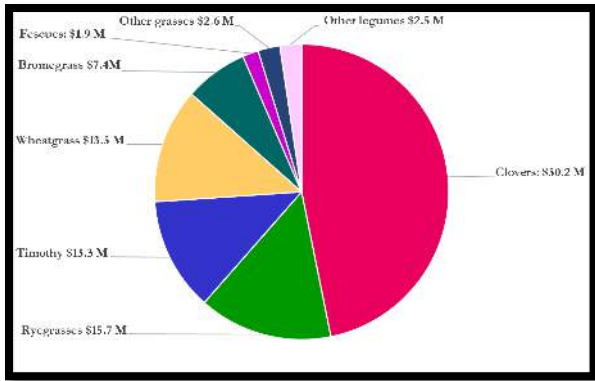
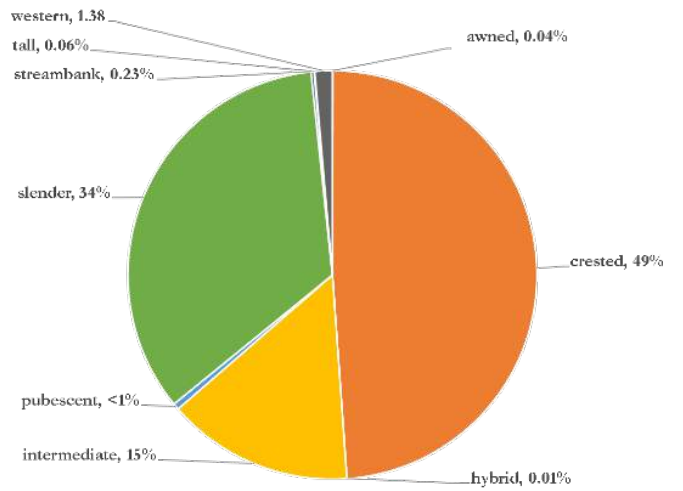
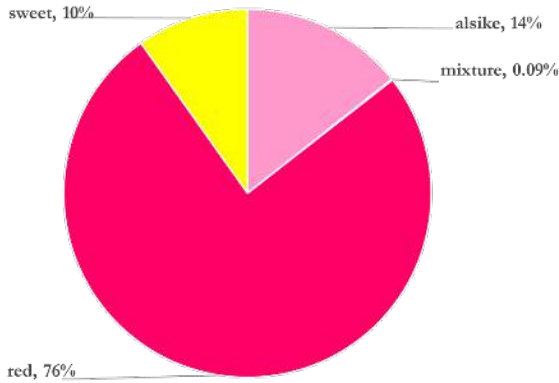


Figure 3: Total levy contributions by type, 2005/06 to 2019/2020

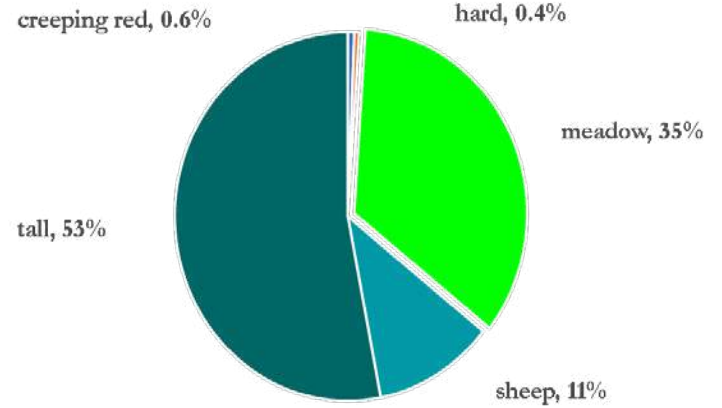
3c Within the wheatgrasses:



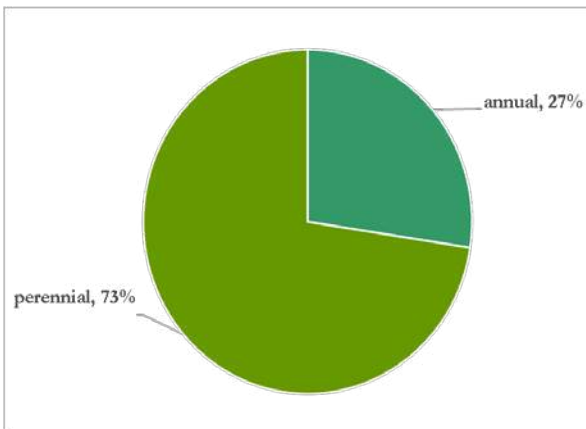
3a Within the clovers:



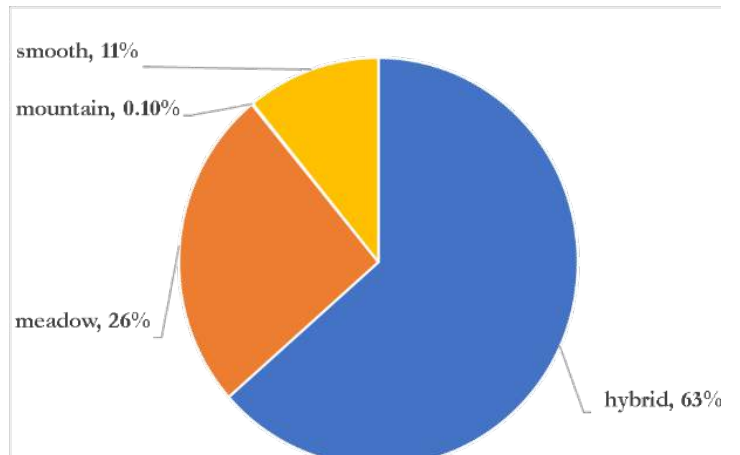
3d Within the fescues:



3b Within the ryegrasses:



3e Within the brome-grasses:



In the last 15- years, field research projects funded by the levy have investigated: fertility management, companion planting, seed placement and row spacing, fertilizer products, plant growth regulator, insecticides, fungicides, and desiccants.

Several organizations established research plots at the Northeast Agriculture Research Foundation (NARF) in Melfort, University of Saskatchewan, AAFC-Scott, and A Horizon Ag Research Ltd, Colonsay.

Trials have been done on:

- red alsike and sweet clover, birdsfoot trefoil, cicer milkvetch and sainfoin
- timothy
- annual and perennial ryegrass
- hybrid and meadow brome
- slender wheatgrass
- tall fescue

In addition to levy funding, grants from the provincial government agriculture have supported applied and basic research on forage seed crops. Programmes such as the Agriculture Demonstration of Ag Demonstration of Practices and Technologies (ADOPT) and the Agriculture Development Fund (ADF), have been very important to advance forage seed research in the province.

SFSDC received grant funding through the ADOPT program to do demonstration projects in grower's fields, or at research institutions (e.g., Melfort, Outlook, Saskatoon).

- 20090017 Effect of coated fertilizer (Agrotain) on hybrid brome grass and timothy.
- 2010 and 2011 Field scale demonstrations for controlling brome grass seed midge hybrid brome grass.
- 201000226 Demonstrate the effects of pod sealants on birdsfoot trefoil seed yield and quality.
- 20110331 2011 Field scale demonstrations of fungicides on timothy and perennial ryegrass.
- 20130350 Application of a desiccant, Reglone, on red clover grown for seed.
- 20130351 Timing of insecticide treatment to control lesser clover leaf weevil in red clover.
- 20130352 Use of alternate row spacings and companion crop (wheat) for establishing forage seed crops (perennial ryegrass, meadow brome grass)
- 20130355 Controlling noxious weeds in timothy, hybrid brome grass, slender wheatgrass, tall fescue.
- 20130356 Controlling noxious weeds and improving seed quality in established alsike clover, red clover, sweet clover and cicer milkvetch.
- 20140338 Fungicides for use on established timothy and tall fescue.
- 20150462 Yield and economics of meadow brome grass with/ without companion crop (wheat).
- 20150463 Pre-seedling cultivation and direct seeding in alternate rows to improve establishment of red clover when planted with fababean.
- 20160365 Demonstrating effects red and alsike clover in rotation with canola, wheat, and peas.
- 20160366 Forage seed establishment and production -extension of 20130352
- 20190451 Seed production of annual clovers (berseem and crimson) when grown under irrigation at Outlook, SK.

Studies include:

- herbicide screening for broadleaf and grassy weed control in legumes and grasses and products to control noxious weeds in established forage seed crops.
- insect survey 2006-07
- control of pests including red clover casebearer, lesser clover leaf weevil in red clover and brome grass seed midge.
- Use of desiccants on legumes, fungicides on grasses (timothy, hybrid brome grass, perennial ryegrass),
- pod sealants to prevent seed shatter in birdsfoot trefoil.
- use of manure in forage seed production.
- nitrogen rate, form, and timing of application to increase seed yield.
- use of urease and nitrification inhibitors for reducing gaseous nitrogen losses.
- improving nitrogen use efficiency different fertilizer formulations
- effect of foliar-applied copper on seed yield

Several ADF projects have been co-funded by SFSDC, typically these are multi-year projects supporting basic and applied research through programs offered as a collaborative venture with partial funding contributed by the Government of Saskatchewan and the Government of Canada under the agriculture partnership agreements.

**With co-funding from the Ministry of Agriculture and industry partners, SFSDC committed \$81,000 of levy funds to support basic and applied research projects valued at \$3,180,127.**

***In other words, every dollar of levy invested leveraged an additional 39 dollars in research.***

**Source: SFSDC audited financial statements and budgeted expense, 2010-11 to 2020-2021 budget, ADF, AFC, SFP contracts**

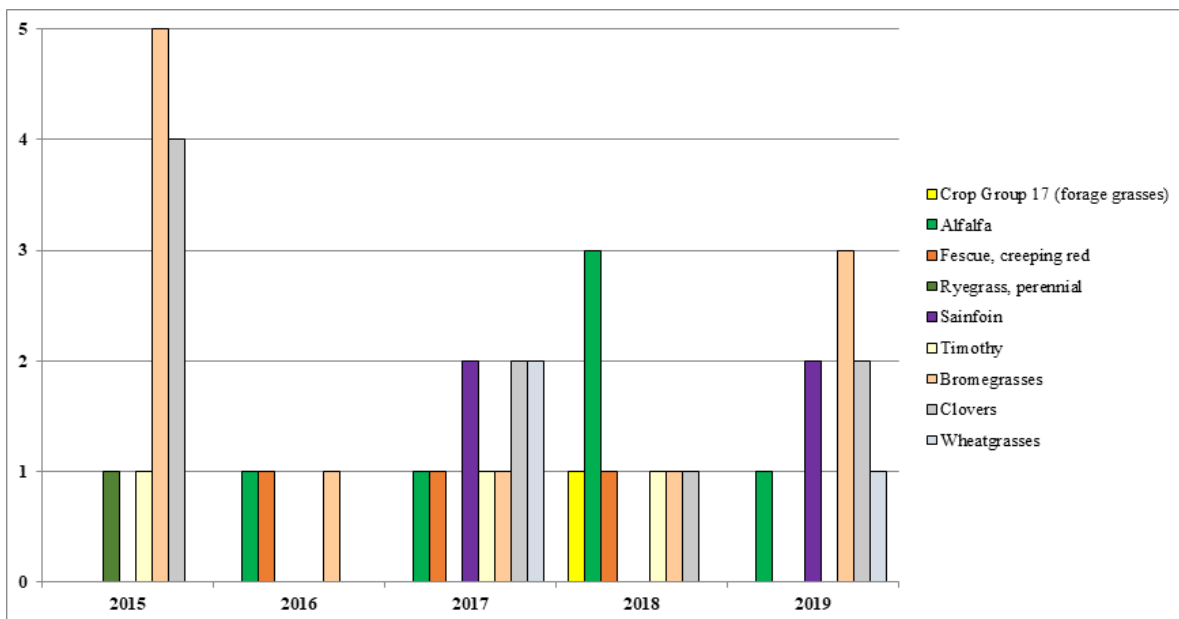
- ADF 20100067 Assessment of urease and nitrification inhibitors for improving nitrogen use efficiency and yield in forage seed production. **SFSDC \$4,000 - total project value \$207,524/3-yrs**
- ADF 20150186 Breeding new sainfoin lines with improved forage characteristics and persistence in Saskatchewan (final report January 2020). **SFSDC \$5,000 - total project value \$169,625/3-yrs**
- ADF 20170007 Integrated management approach to optimize red clover seed production in Saskatchewan (final report 2020). **SFSDC \$22,500 - total project value \$262,800/3-yrs**
- ADF 20180173 Enhancing seed and biomass production and drought tolerance of plains rough fescue using novel seed treatments. **SFSDC \$2,000 - total project value \$167,503/3-yrs**
- ADF 20180184 Evaluation of forage Galega (*Galega orientalis*) as a new forage legume in pure and grass- legume mixed stands. **SFSDC \$7,5000 - total project value \$234,915/3-yrs**
- ADF 20180351 Doubled haploidy methodology for the forage grasses. **SFSDC \$8,000, total project value \$635,372/4-yrs**
- ADF20190197 Developing hybrid bromegrass with improved neutral detergent fibre digestibility. **SFSDC \$2,000 - total project value \$114,060/3-yrs**
- ADF20190244 Development of meadow brome and cicer milkvetch varieties for stockpile. **SFSDC \$2,500 - total project value \$371,428/4-yrs**
- ADF20190322 Investigating the role of copper fertility in ergot infestation of forage crops. **SFSDC \$2,000 -total project value \$100,000/2-yrs**
- ADF 201200420 Identifying new diversity and developing genomic resources for bromegrass (*Bromus* spp.) forage crop breeding. **SFSDC \$10,500 - total project value \$530,000/3-yrs**

Working with the Alberta Funding Consortium (AFC), SFSDC co-funded the project, Formation of Resistant Wild Oat Action Committee (RWOAC) and Action Plan. **SFSDC \$5,000, total project value \$258,250/2-yrs. This represents a 50 to 1 leverage ratio.**

Levy funds have been used to establish and maintain forage seed variety demonstration trials. For several years, the Saskatchewan Forage Variety Demonstration trials were co-funded by SFSDC, and the Melfort location featured standard and new varieties of hybrid, meadow and smooth bromegrass; crested wheatgrass; festolium; tall fescue; timothy; cicer milkvetch, sainfoin, and alfalfa. The site was discontinued in 2019. During the 2019-2020 year, an application for two new trial sites was approved under the provincial Strategic Field Program initiative. The project was supported, **SFSDC contributions \$10,000, total project value \$128,650.**

As part of the ongoing commitment for market and product development, SFSDC works with growers, directors, and industry agronomists to determine minor use pesticide priorities for herbicides, insecticides, and fungicides for Saskatchewan forage seed producers. With limited acreage, SFSDC works closely with provincial organizations in Manitoba and Alberta and coordinates data collection and prioritization work done by the Prairie Pesticide Minor Use program coordinator and Saskatchewan Agriculture’s provincial representative. Decisions are then communicated to the Agriculture and Agri-Food Canada minor use priority program through the provincial minor use coordinators.

Working with the Prairie Pesticide Minor Use program coordinator, forage seed associations and the provincial minor use coordinators, from 2015 to 2019, the following products have been registered through the Minor Use prioritization program. Data source Calvin Yodder. Not including alfalfa, 41 products have been approved for use in forage seed and forages crops, 2015 to 2019.



### *Looking ahead to the next 15 years*

*The SFSDC comprises a relatively small number of producers compared to other levy-funded groups, yet SFSDC has maintained a full complement of producers serving on the board of directors. Without the dedication of producers, governance activities would be difficult, subsequently, succession planning will remain a priority for SFSDC.*

*Next, with a relatively small levy, SFSDC research, market development and communication activities will need to be lean and focused in the years ahead, and sources of external funding and partnering with other organizations is one way to continue serving the forage seed growers of SK.*

*Finally, without forage seed buyers and end-use customers for forage seed, the forage seed growers would not have a commercial market for their production. Working with industry groups and understanding forage seed market forces and relevant policies will be a priority for SFSDC in the years ahead as the sector adapts to new technologies and shifting public perceptions and expectations of the agriculture industry. SFSDC is truly grateful for the opportunity to work with other individuals and groups interested in forage seed production and improving the profitability of Saskatchewan producers and sustainability of agriculture.*