

WESTERN GRAINS RESEARCH FOUNDATION ANNUAL REPORT 2017

Farmer Funded Farmer Directed



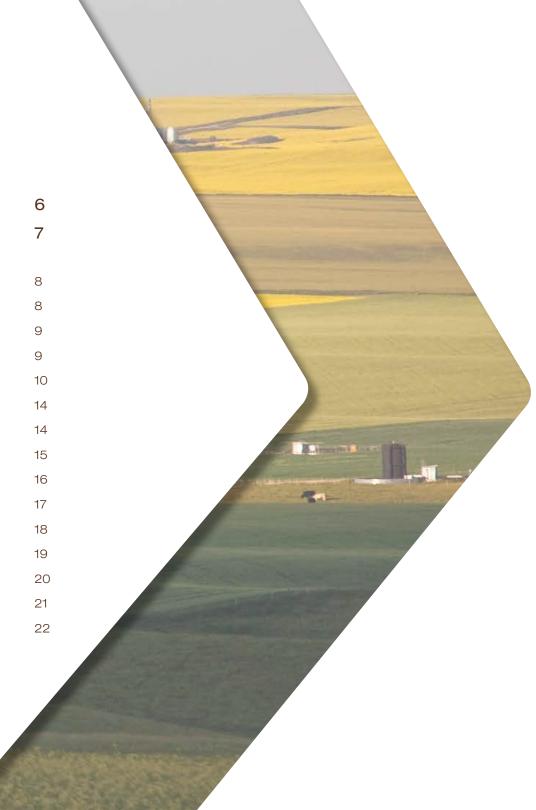
WGRF will continue to build on its unique strength of being a **farmer-funded**, **farmer-directed** organization focused on **funding field crop research** for western Canadian farmers.



WESTERN GRAINS RESEARCH FOUNDATION

ANNUAL REPORT 2017

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awarded in scholarships to attract the brightest minds in crop research

funding Midge

Tolerant Wheat

Stewardship

MIDGE

WHEAT

TOLERANT

Plant · Protect · Preserve

Years

rships to attract crop research that benefits western Canadian producers. Since 1981, th

Canadian producers. Since 1981, the WGRF Board has given producers a voice in agricultural research funding decisions. WGRF invests over \$17 million annually into variety development and field crop research.

WGRF: AN OVERVIEW

WGRF is a farmer funded and directed

non-profit organization investing in field



Largest

producer funder of crop research in Canada

> **\$17M** in 2017



250 research proje on over 20 crops

over **100** researchers funded ^{\$}169 million+

invested in research since 1981



Over Oppojects projects listed on the WGRF website

UAL REPOR

Current or committed funding:

cts

WGRF Board has given producers a voice in funding agriculture research since



B222 million+ in research investments by 2020

> WESTERN GRAINS RESEARCH FOUNDATION

2017 CHAIR'S MESSAGE



2017 was a pivotal year for WGRF with the launch of our fouryear Transition Plan. Established with input from our members, cofunders and the WGRF Research Committee, the plan focuses on three areas: research, communications and governance/ operations. With thanks to WGRF staff

and the support given to Board governance processes, I am pleased to report the successful implementation of year one.

WGRF continues to provide research leadership in western Canadian cropping systems. We remain the largest producer funder of crop research in Canada with \$17 million invested in 2017. WGRF is currently supporting more than 250 research projects on over 20 crops. In 2017, the Board approved up to \$5.5 million for 27 new research projects. This all helps to accelerate producers towards more sustainable crop production. WGRF made a notable impact with the help of Growing Forward 2 (GF2), the five-year government cost-share funding program that wraps up in March 2018. With GF2 support, we were able to successfully lead the Wheat Cluster and register 14 new varieties in 2017. WGRF also provided funding under GF2 for research into barley, mycotoxins, organic crops, winter wheat, mustard and pulses.

Further, a funding partnership with Genome Canada is leading to exciting research that will contribute to new breeding tools.

Communications is also at the forefront of WGRF activities. Technology transfer is critical to conveying results to agronomists and producers, ensuring WGRF-funded research has a valuable impact in the field. Ongoing communications efforts also help to share the "WGRF story" with stakeholders.

I am proud to have served as WGRF Board Chair this past year. As producers, we should all be very proud of these investments we've made in our industry.

Dave Sefton

2017 Board Chair

EXECUTIVE DIRECTOR'S MESSAGE



Leadership. Collaboration. Transition. Those three words help to sum up WGRF activities in 2017.

In the first year of the Transition Plan, we built upon our experience and collaborative approach to research through continued participation in western provincial funding.

WGRF led the submission of an Integrated Crop

Agronomy Cluster to Agri-Food and Agriculture Canada (AAFC) under the Canadian Agriculture Partnership (CAP) program. We are continuing to invest under the Western Canadian Agronomy Research Capacity Initiative. In 2017, funding was approved for cropping systems related positions at the University of Manitoba and the University of Saskatchewan. Funding for a position at the University of Alberta was approved in early 2018.

The Western Canadian Deduction (WCD) ended on July 31, 2017 with a smooth transition to the check-offs collected by wheat and barley commissions/associations. WGRF is facilitating the transition of wheat and barley research leadership by the commissions/associations and has remained involved in wheat and barley variety development through the Core and Cluster programs and ongoing use of royalty funds. WGRF also facilitated the development and submitted the wheat cluster to AAFC under CAP on behalf of the applicant the Canadian Wheat Research Coalition.

WGRF's communications and technology transfer programming continues to operate at a high level, contributing to our recognition as a significant funder of field crop research. Through our support of the Prairie Pest Monitoring Network, we participated in the development of the "Field Heroes" awareness campaign. The award-winning initiative is increasing producer and agronomist recognition of beneficial insects and the important role they play in pest management.

WGRF continues to participate in the Grains Round Table and its Crop Research Working Group, the National Wheat Research Strategy Task Force, and will be joining the Canadian Round Table for Sustainable Crops.

With increased use of the Endowment Fund for new initiatives and continued use of the Wheat and Barley Funds, I anticipate that WGRF's annual research investments will exceed \$22 million by 2020.

I would like to thank the staff and Board for their commitment to WGRF as we work together to implement the Transition Plan that is making a difference for producers in Western Canada.

Garth Patterson

WGRF Executive Director



Transition Plan Highlights:

- Cropping system research funding for all crops
- Crop specific research funding for intermediate crops: corn, soybean, fababean, sunflower, mustard, canaryseed, oats, flax, winter cereals
- Continued wheat and barley variety development funding
- Enhanced reporting of research
- Extension/technology
 transfer
- Interaction with key influencers
- Targeted involvement in research policy

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2017 BOARD OF DIRECTORS

Dave Sefton, WGRF Chair, Broadview, SK

Dr. Keith Degenhardt, WGRF Vice-Chair, Hughenden, AB Corey Loessin, Radisson, SK Dale Hicks, Outlook, SK Dylan Wiebe, Altona, MB Elroy Trithardt, Kipling, SK Gerry Hertz, Edenwold, SK Glenn Tait, North Battleford, SK Graeme Manness, Domain, MB Jason Skotheim, Spruce Home, SK Jeff Nielsen, Olds, AB Joe Rennick, Milestone, SK Malcolm Odermatt, Fort St John, BC Simon Ellis, Wawanesa, MB Stewart Wells, Swift Current, SK Terry James, Vegreville, AB Terry Young, Lacombe, AB Todd Lewis, Regina, SK

MEMBERSHIP

The WGRF Bylaws allow three classes of Members: A, B and C. Class A is for producer organizations while Classes B and C are for government and industry organizations, respectively. **Class A Members (Producer Organizations):** Agricultural Producers Association of Saskatchewan Alberta Barley Alberta Federation of Agriculture Alberta Wheat Commission BC Grain Producers Association Canadian Canola Growers Association Canadian Seed Growers' Association Keystone Agricultural Producers

Manitoba Wheat and Barley Growers Association

National Farmers Union

Prairie Oat Growers Association Saskatchewan Barley Development Commission Saskatchewan Flax Development Commission Saskatchewan Wheat Development Commission Western Barley Growers Association Western Canadian Wheat Growers Association Western Pulse Growers Western Winter Cereal Producers

Class B Members (Government): Agriculture and Agri-Food Canada



2018 OUTLOOK



WGRF is an important organization for western Canadian producers. I am very honored to have been elected as the 2018 Chair of WGRF and I am excited about the opportunities in front of WGRF.

As we look ahead to the next three years of the Transition Plan, there is much more exciting work to be done. Key initiatives include: planning for WGRF past 2020; supporting the wheat and barley commissions/associations in their transition to leadership in variety development funding; development and funding of proposals in Genome Canada's next agriculture competition; increasing WGRF's activities in more sustainable cropping systems; implementing phase two of agronomy research capacity funding; funding and participating in the Canadian Agriculture Partnership program; and continued growth in communications/technology transfer programming.

As an organization, WGRF continues to adapt to changes in the industry. Amidst change, a constant of WGRF is our collaborative approach to funding research. WGRF has the experience and financial resources that offers a unique opportunity for farmers to provide research leadership for western Canadian cropping systems.

I look forward to helping strengthen WGRF's position as a leading funder of agricultural research in Western Canada.

Terry Young Terry J. Young

WGRF STAFF

Garth Patterson, M.Sc., PAg Executive Director

Gina Feist, B.Sc., MBA Research Program Manager

Mike Espeseth, B.Comm Communications Manager

Pat Flaten M.Sc., PAg Research Program Manager

Candice Lajeunesse Program Administrator

Barbara Kammerer, CPA, CMA Financial Officer

Joelle Harris, B.S.A., PAg Research Program Manager

Gord Androsoff, M.Sc., PAg Research Program Manager



LISTING OF THE PROJECTS COMMENCING IN 2017

Below is a listing of the 26 projects starting in 2017 for which WGRF approved funding:

Researcher	Institution	Length	Amount	Project Title
Alejandro Costamagna	University of Manitoba	3 years	\$107,839	Determining the role of crop and non-crop habitats to provide sustainable aphid suppression in soybeans
Bill Biligetu	University of Saskatchewan	5 years	\$98,635	Selection of clonal propagated alfalfa and sainfoin plants under grass or legume competition
Breanne Tidemann	AAFC	4 years	\$174,445	Harrington Seed Destructor evaluation at field scale in Alberta
Curtis Pozniak	University of Saskatchewan	1 year	\$500,000	Ten wheat genomes
Don Flaten	University of Manitoba	3 years	\$85,227	Soybean response to potassium fertility and fertilizer in Manitoba
Haley Catton	AAFC	3 years	\$120,146	Managing wireworms in southern Alberta wheat fields with crop rotations and beneficial insects
Helen Booker	University of Saskatchewan	3 years	\$59,812	Characterization of flax breeding lines for northern adaptation and stability of yield and maturity
Helen Booker	University of Saskatchewan	3 years	\$136,903	Characterization of rust resistance genes of flax
Hossein Borhan	AAFC	4 years	\$138,766	Mapping and introgression of the highly effective <i>Brassica rapa</i> blackleg resistance gene RIm11 into spring-type <i>Brassica napus</i>
Jamie Larsen	AAFC	3 years	\$174,800	Using agronomy to reduce ergot susceptibility in fall rye
Jamie Larsen	AAFC	3 years	\$79,350	Evaluation and breeding of winter durum wheat for southern Alberta
Jamie Larsen	AAFC	4 years	\$183,864	An integration of agronomy and breeding to reduce disease susceptibility in fall rye
Jessica Weber	WARC	3 years	\$118,680	Lentil input study
Julia Leeson	AAFC	2 years	\$138,000	2017 Alberta Weed Survey
Mario Tenuta	University of Manitoba	2 years	\$121,613	Manitoba survey and molecular quantification of soybean cyst nematode
Neil Harker	AAFC	3 years	\$120,000	Long-term sustainable canola production - all phases rotations
Nora Foroud	AAFC	2 years	\$139,150	Expansion of in vitro selection to develop FHB and leaf spot resistant wheat and barley

Researcher	Institution	Length	Amount	Project Title
Pierre Hucl	University of Saskatchewan	3 years	\$129,030	Characterizing canaryseed germplasm for Fusarium Head Blight and enhanced herbicide tolerance
Ramona Mohr	AAFC	5 years	\$98,326	Sustainable soybean cropping systems for western Manitoba
Ravindra Chibbar	University of Saskatchewan	3 years	\$98,210	Comparing wheat allergenicity in ancient and modern wheats
Robert Gulden	University of Manitoba	2 years	\$57,500	Defining and refining the end of the critical period of weed control in soybean for Manitoba
Stephen Wyard	University of Manitoba	2 years	\$161,685	Control of sclerotinia using RNA interference technologies
Steve Shirtliffe	University of Saskatchewan	3 years	\$101,061	Developing field pea varietal blends for higher yields and pest suppression
Syama Chatterton	AAFC	3 years	\$155,710	Epidemiology of chocolate spot of faba bean
William May	AAFC	3 years	\$64,372	Determining the impact of aphids in canaryseed
Yvonne Lawley	University of Manitoba	3 years	\$266,400	Predicting Soybean Phenology in Manitoba



FIELD

ONLINE SEARCH TOOL

More than 400 WGRF-funded research projects are now listed at westerngrains.com in a user-friendly, searchable format. Search by researcher, institution, keyword or co-funder to find out more details of what projects we have funded in the past and present.

This search tool was part of the WGRF website revamp in March 2017. We are working to continually improve the project listing section to keep producers and stakeholders updated on our research commitments.



WGRF FUNDED RESEARCH

NOT ALL HEROES WEAR CAPES

Field Heroes Campaign was the Winner of the 2017 Canadian Agri-Marketing Association Award for Public Affairs/Issues Management Program



What **field hero** can consume more than **8** black cutworms per day? FIND OUT HERE

> FIELD HEROES BEFORE YOU SPRAY



Western Grains Research Foundation

WGRF aims to fill a current gap in the area of crop production systems research.



Agronomic challenges faced by western Canadian farmers cut across multiple crops – everything from soil health and crop rotation to herbicide resistance and climate change mitigation.



WGRF makes funding decisions that are mindful of the economic interests of producers.



WGRF works with researchers to identify multi-crop agronomy projects that provide significant benefits to the whole farm using a systems approach.



WGRF is focused on research that will support producers with resilient cropping systems in order to adapt to climate change.

Sustainability

WGRF funded research will help producers mitigate climate change – such as agronomic practices to reduce greenhouse gases and increase carbon sinks.

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TWIGG & COMPANY

CHARTERED PROFESSIONAL ACCOUNTANTS 650 Regency Center 333 – 25th Street East Saskatoon, SK S7K 0L4 Canada

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INDEPENDENT AUDITORS' REPORT

TO THE DIRECTORS OF WESTERN GRAINS RESEARCH FOUNDATION

We have audited the accompanying financial statements of Western Grains Research Foundation, which comprise the statement of financial position as at December 31, 2017 and the statements of operations and changes in fund balances, and cash flows for the year the ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about amounts and disclosures in the financial statements. The procedures selected depend on our judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our qualified audit opinion.

Basis for Qualified Opinion

The Foundation derives part of its earnings from payments from wheat and barley producers and royalties, the completeness of which is not susceptible to satisfactory audit verification. Accordingly, our verification of revenue from these sources was limited to the amounts recorded in the records of the Foundation and we were not able to determine whether any adjustments might be necessary to payments received from producers or royalties, excess of revenue over expenditures, and cash flows from operations for the years ended December 31, 2017, and December 31, 2016, current assets as of December 31, 2017, and December 31, 2016, and fund balances as at January 1 and December 31, for both the 2017 and 2016 years.

Qualified Opinion

In our opinion, except for the possible effects of the matter described in the Basis for Qualified Opinion paragraph, these financial statements present fairly, in all material respects, the financial position of Western Grains Research Foundation as at December 31, 2017, 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.

The financial statements as at December 31, 2016 and for the year then ended were audited by other auditors who expressed a qualified opinion on those statements in their report dated February 13, 2017.

Thingy & Company

Chartered Accountants February 12, 2018 Saskatoon, Saskatchewan

STATEMENT OF FINANCIAL POSITION

as at December 31, 2017

	2017	2016
CURRENT ASSETS		
Cash	\$ 496,486	\$ 754,007
Cash and cash equivalents (Note 3)	22,070,381	16,901,074
Accounts receivable (Note 6)	2,299,948	5,341,234
Prepaid expenses	7,300	6,923
Investments in debt instruments (Note 7)	49,414,684	42,884,334
Investments in equity securities	103,109,624	101,138,359
Investments in bond exchange traded funds	 2,288,351	 -
	179,686,774	167,025,931
CURRENT LIABILITIES		
Accounts payable and accrued liabilities	 23,683	 37,513
FUND BALANCES (Note 4)		
Capital Fund	9,066,972	9,066,972
Endowment Fund (Schedule 1)	131,856,530	120,625,926
Wheat Fund (Schedule 2)	35,432,754	34,550,594
Barley Fund (Schedule 3)	3,306,835	2,744,926
	 179,663,091	 166,988,418
	\$ 179,686,774	\$ 167,025,931

See accompanying notes.

Approved by the board:

Dave Sefton

Dr. Keith J. Degenhardt

Dr. Keith J. Degenhardt DIRECTOR

STATEMENT OF OPERATIONS AND CHANGES IN FUND BALANCES

year ended December 31, 2017

	2017	2016
REVENUES		
Payments received from producers	\$ 6,216,576	\$ 7,470,068
Unrealized gain on investments (Note 8)	7,138,767	1,621,520
Investment income	3,131,754	3,641,682
Other income (Note 9)	9,559,326	6,732,469
Royalties	1,955,033	1,875,517
Gain on sale of investments (Note 8)	3,936,161	2,094,034
Foreign exchange gain (loss)	 (356,847)	 8,483
	 31,580,770	 23,443,773
EXPENDITURES		
Research funding	16,795,351	18,082,704
Operating & program expenses (Schedule 4)	1,605,246	1,689,534
Royalty research funding	 505,500	 -
	18,906,097	19,772,238
Excess of revenue over expenditures for the year	12,674,673	3,671,535
Fund balances, beginning of year	 166,988,418	 163,316,883
FUND BALANCES, END OF YEAR	\$ 179,663,091	\$ 166,988,418

See accompanying notes.



STATEMENT OF CASH FLOWS

year ended December 31, 2017

	2017	2016
CASH FLOWS FROM (USED IN) OPERATING ACTIVITIES		
Excess of revenue over expenditures for the year	\$ 12,674,673	\$ 3,671,535
Items not affecting cash		
Unrealized gain on investments	(7,138,767)	(1,621,520)
Amortization of net premiums on bonds	9,650	9,731
Gain on sale of investments	(3,936,161)	(2,094,034)
Changes in non-cash working capital	 3,027,079	 5,959,573
	4,636,474	5,925,285

CASH FLOWS FROM (USED IN) INVESTING ACTIVITIES

Purchase of investments	(63,204,258)	(60,737,759)
Proceeds on investments redeemed	63,479,570	62,377,344
	275,312	1,639,585
Increase in cash during the year	4,911,786	7,564,870
Cash position, beginning of year	17,655,081	10,090,211
Cash position, end of year	22,566,867	17,655,081

CASH IS COMPRISED OF

Operating cash	496,486	754,007
Cash and short-term notes held by investment dealer	22,070,381	16,901,074
	\$ 22,566,867	\$ 17,655,081

SCHEDULE 1: ENDOWMENT FUND OPERATIONS AND CHANGES IN FUND BALANCE

year ended December 31, 2017

	20)17		2016
REVENUES				
Investment income	\$ 2,473,	830	\$ 2,86	65,536
Other income (Note 9)	7,475,	464	5,0-	13,244
Gain on sale of investments (Note 8)	3,383,	393	2,02	27,766
Unrealized gain on investments (Note 8)	5,384,	490	94	45,564
Foreign exchange gain (loss)	(284,6	604)		24,589
	18,432,	573	10,87	76,699
EXPENDITURES				
Research funding				
Variety Development	2,536,	225	3,12	25,516
Agronomy	2,431,	486	2,29	96,870
Agronomy adjustment from Barley Fund (Note 13)	437,	641		-
Post Harvest Management	562,	264	57	76,751
Minor Crop Development	86,	464	4(02,082
Crop Risk Management	56,	633	20	05,263
Crop Utilization	86,	719	11	15,428
	6,197,	432	6,72	21,910
Operating & program expenses (Schedule 4)	1,004,	537	98	82,508
	7,201,	969	7,70	04,418
Excess of revenue over expenditures for the year	11,230,	604	3,17	72,281
Endowment fund, beginning of year	120,625,	926	117,45	53,645
ENDOWMENT FUND, END OF YEAR	\$ 131,856,	530	\$ 120,62	25,926

See accompanying notes.

SCHEDULE 2: WHEAT FUND OPERATIONS AND CHANGES IN FUND BALANCE

year ended December 31, 2017

EVENUES		2017		2016
Payments received from producers (Note 2)	\$	5,502,340	\$	6,626,099
Royalties	Ŧ	1,724,308	Ŧ	1,734,480
Other income (Note 9)		1,983,862		1,529,225
Investment income		1,396		718
		9,211,906		9,890,522
XPENDITURES				
Research funding				
Agriculture and Agri-Food Canada		6,388,281		6,346,22
University of Saskatchewan		1,635,958		1,822,56
University of Manitoba		971,355		847,45
CEROM		394,384		397,34
University of Alberta		338,301		371,05
University of Guelph		174,996		273,21
National Research Council		40,597		48,28
Alberta Agriculture and Rural Development		32,412		61,83
		9,976,284		10,167,97
Royalty research funding		505,500		
Operating & program expenses (Schedule 4)		534,846		626,92
		11,016,630		10,794,89
Excess (deficiency) of revenue over expenditures for the year		(1,804,724)		(904,374
Transfer from wheat reserve account		1,054,159		1,283,00
Operating account, beginning of year		1,658,638		1,280,01
OPERATING ACCOUNT, END OF YEAR		908,073		1,658,63
Investment income		610,292		715,86
Gain on sale of investments (Note 8)		499,737		45,79
Unrealized gain on investments (Note 8)		1,636,140		641,41
Foreign exchange loss		(59,285)		(9,84
Reserve income for the year		2,686,884		1,393,23
Transfer from wheat operating account		(1,054,159)		(1,283,00-
Reserve account, beginning of year		32,891,956		32,781,72
RESERVE ACCOUNT, END OF YEAR		34,524,681		32,891,95
HEAT FUND, END OF YEAR	\$	35,432,754	\$	34,550,594

OPERATING ACCOUNT

RESERVE ACCOUNT

See accompanying notes.

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SCHEDULE 3: BARLEY FUND OPERATIONS AND CHANGES IN FUND BALANCE

year ended December 31, 2017

	2017	2016
REVENUES		
Payments received from producers (Note 2)	\$ 714,236	\$ 843,969
Other income (Note 9)	100,000	190,00
Royalties	230,725	141,03
Investment income	199	10
	 1,045,160	 1,175,10
EXPENDITURES		
Research funding		
Agriculture and Agri-Food Canada	272,235	266,89
Alberta Barley Commission	234,760	325,27
Agronomy adjustment to Endowment Fund (Note 13)	(437,641)	
University of Saskatchewan	552,281	565,28
University of Manitoba	 -	 35,36
	621,635	1,192,82
Operating & program expenses (Schedule 4)	 65,863	 80,10
	 687,498	 1,272,92
Excess of expenditures over revenue for the year	357,662	(97,81
Transfer from (to) barley reserve account	(419,067)	83,88
Operating account, beginning of year	113,742	127,67
OPERATING ACCOUNT, END OF YEAR	 52,337	 113,74
Investment income	46,037	59,46
Gain on sale of investments (Note 8)	53,031	20,47
Unrealized gain on investments (Note 8)	118,137	34,54
Foreign exchange loss	(12,958)	(6,26
Reserve income for the year	 204,247	 108,21
Transfer from (to) barley operating account	419,067	(83,884
Reserve account, beginning of year	2,631,184	2,606,85
RESERVE ACCOUNT, END OF YEAR	 3,254,498	 2,631,18
ARLEY FUND, END OF YEAR	\$ 3,306,835	\$ 2,744,92

See accompanying notes.

OPERATING ACCOUNT

RESERVE ACCOUNT

WESTERN GRAINS RESEARCH FOUNDATION

SCHEDULE 4: OPERATING AND PROGRAM EXPENDITURES

year ended December 31, 2017

	Endowment Fund	Wheat Fund	Barley Fund	2017	Total 2016
EXPENDITURES					
Wages and benefits	\$ 496,102	\$ 289,392	\$ 41,342	\$ 826,836	\$ 819,383
Communications	187,856	123,860	7,727	319,443	259,657
Scholarships	100,000	-	-	100,000	120,000
Office (Note 11)	97,868	57,091	8,155	163,114	186,646
Professional fees	17,157	10,008	1,430	28,595	37,835
Consulting fees	21,834	7,044	317	29,195	23,634
Travel and other	58,100	35,712	5,213	99,025	175,054
Directors per diems	 25,620	 11,739	 1,679	 39,038	 67,325
OPERATING AND PROGRAM EXPENDITURES FOR THE YEAR	\$ 1,004,537	\$ 534,846	\$ 65,863	\$ 1,605,246	\$ 1,689,534

See accompanying notes.

FOR THE YEAR ENDED DECEMBER 31, 2017

DESCRIPTION OF THE FOUNDATION

Western Grains Research Foundation (the "Foundation" or "WGRF") is a farmer funded and directed not-for-profit organization investing in agricultural field crop research to benefit western Canadian producers.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES The financial statements have been prepared in accordance with Canadian accounting standards for not-for-profit organizations "NPO accounting standards" and reflect the following significant accounting policies:

REVENUE RECOGNITION

a. Wheat and Barley Funds

Investment income, including any unrealized changes in fair market value in equity securities, is recognized as income in the year earned.

Revenue earned by the wheat and barley funds consists primarily of payments received from producers as detailed in Note 4.

The payment from producers is recognized in the operating account of the respective fund as revenue when the amount is known and collection is reasonably assured; some amounts cannot be determined by the Foundation prior to receipt.

Royalties earned by the wheat and barley funds are recognized in the operating accounts of the respective funds when the amount is known and collection is reasonably assured; some amounts cannot be determined by the Foundation prior to receipt

b. Endowment Fund

Investment income, including any unrealized changes in fair value in equity securities, and Exchange Traded Funds is recognized as income in the year earned.

In some years, WGRF has been awarded funds by the Canadian Transportation Agency ("CTA") as a result of Canadian Pacific Railway Company ("CP") and Canadian National Railway Company ("CN") exceeding their MRE (Maximum Revenue Entitlement) for movement of grain in Western Canada. This revenue is recognized and recorded as other income in the endowment fund operations when the amount is known and collection is reasonably assured. In December 2017, the CTA directed CN to pay the Foundation \$6,062,428 (Note 9) for the 2016/17 crop year and also directed CP to pay the Foundation \$1,132,894 (Note 9) for the 2016/17 crop year. In 2016 CN paid the Foundation \$1,094,009 (Note 9) and CP paid the Foundation \$3,555,807 as per CTA award for the 2015/16 crop year (Note 9).

RECOGNITION OF CONTRIBUTIONS

WGRF follows the restricted fund method whereby revenues of a specific fund are recognized in the fund corresponding to the purpose for which they were contributed when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

INVESTMENT INCOME

Investment income includes interest and dividend income earned in the year and realized gains and losses from dispositions of investment assets in the year. Unrealized changes in fair value from year to year are recognized in earnings.

FUND OPERATIONS

Revenue earned, net of operating expenditures, is allocated to designated funds. Research funding paid in the year is charged against the respective fund.

FOR THE YEAR ENDED DECEMBER 31, 2017

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

ROYALTIES

The Foundation's share of royalties derived from wheat and/or barley varietal developments are recorded as royalty revenue in the respective wheat and/or barley statement of fund operations. Upon approval of the Board of Directors the royalty funds may be subsequently reinvested with research organizations for the funding of specific projects and recorded as royalty expenditures in the respective statement of fund revenue and expenditures for wheat and/or barley.

FOREIGN CURRENCY TRANSLATION

The Foundation follows the temporal method of accounting for the translation of foreign currency amounts into Canadian dollars. Under this method, monetary assets and liabilities denominated in foreign currencies are translated into Canadian dollars at the exchange rate in effect at the balance sheet date. Non-monetary assets are translated at the historical rate of exchange. Revenue and expenses are translated at the rate of exchange prevailing on the transaction date. Gains and losses on translation are reflected in income.

FINANCIAL INSTRUMENTS

The Foundation initially measures its financial assets and financial liabilities at fair value. It subsequently measures investments in equity securities and Exchange Traded Funds at fair value. Other financial assets and financial liabilities including cash, cash and cash equivalents, accounts receivable, accrued interest receivable, investments in debt instruments and accounts payable and accrued liabilities are subsequently measured at amortized cost.

USE OF ESTIMATES

The preparation of financial statements in conformity with NPO accounting standards requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. The inherent uncertainty involved in making such estimates and assumptions may impact the actual results reported in future periods.

CASH AND CASH EQUIVALENTS Cash and cash equivalents consist of balances with banks and short-term investments with maturities of three months or less.

FUNDS CAPITAL FUND

The Foundation was funded by the Canadian Ministry of Agriculture on May 2, 1983 by a \$9,066,972 contribution to the Capital Fund. The funding contribution represented an amount equivalent to the balance remaining in the Prairie Farm Emergency Fund, which was derived entirely by deductions from prairie farmer grain sales.

FOR THE YEAR ENDED DECEMBER 31, 2017

FUNDS ENDOWMENT FUND

Annual investment revenue earned from the initial Capital Fund contribution and funds awarded by the CTA to the Foundation as a result of CN and CP exceeding their Maximum Revenue Entitlements for the movement of grain in Western Canada, net of operating and research funding expenditures, is allocated to the Endowment Fund. The Endowment Fund is not externally restricted and can be spent at the discretion of the Foundation's Board of Directors.

WHEAT FUND AND BARLEY FUND

Under federal regulations effective August 1, 2012 through July 31, 2017, licensed grain buyers were required to deduct the Western Canadian Deduction levy of \$0.48 per tonne for wheat and \$0.56 per tonne for barley and remit to the Alberta Barley Commission (ABC). A portion of the levy was directed to market development and technical assistance and administration. ABC remitted the amount directed for research to the Foundation. WGRF received \$0.30 per tonne for wheat and \$0.50 per tonne for barley net of producer refunds. The funds were invested and directed to fund research projects for wheat and barley.

Subsequent to July 31, 2017 WGRF is no longer the recipient of the Western Canadian Deduction. Provincial wheat and barley commissions are the recipients of the Western Canadian Deduction beginning August 1, 2017.

In 2009, the Board approved a motion to increase the minimum Wheat Fund reserve account balance to \$8.8 million from \$4.8 million (the amount previously required under the Canadian Wheat Board Act, repealed August 1, 2012).

INCOME TAX STATUS The Foundation is a registered charity, designated as a public foundation under the Income Tax Act of Canada. As such, it is not subject to income taxes.

ACCOUNTS RECEIVABLE	Accounts receivable include the following:	2017	2016
	Railway Excess Maximum Revenue Entitlement receivable	\$ 1,132,894	\$ 3,555,807
	Receivables under joint research funding agreements	491,091	640,205
	Accrued interest receivable	400,416	340,763
	Royalty receivables	260,875	320,514
	Producer Check-off receivable	-	470,704
	GST receivable	14,672	13,241
		\$ 2,299,948	\$ 5,341,234

INVEST

TMENT IN DEBT	Invest
INSTRUMENTS	Type & N

Investment Type & Maturity	Effective Interest Rates	2017				201	16		
		Am	ortized Cost	м	arket Value	An	nortized Cost		Market Value
Endowment Fun	d:								
Corporate Bonds	including Bond Strip Ins	strumer	nts						
2018	1.89% - 2.09%	\$	1,904,371	\$	1,906,569	\$	1,914,368	\$	1,931,270
2019	2.37%		1,000,523		1,004,900		1,000,800		1,020,400
Corporate Long E	Bond Bear Note								
2019	0.80% (*)		5,000,000		4,922,232		5,000,000		4,971,433
Provincial Bonds									
2025	2.30% - 2.38%		2,994,790		2,914,140		2,994,166		2,886,180
Guaranteed Inves	tment Certificates								
2017	1.65% - 2.30%		-		-		9,800,000		9,800,000
2018	1.35% - 2.56%		8,900,000		8,900,000		6,400,000		6,400,000
2019	1.55% - 2.85%		7,640,000		7,640,000		4,240,000		4,240,000
2020	1.65% - 2.60%		3,615,000		3,615,000		115,000		115,000
2021	2.05% - 2.70%		1,100,000		1,100,000		-		-
2022	2.25%		1,000,000		1,000,000		-		-
Step-Up Note - e	xtendable to 2021. Inter	est rate	e increases annuall	y if ext	ended.				
2018	2.0%		1,000,000		985,500		1,000,000		1,000,000
Step-Up Notes -	extendable to 2022. Inte	rest ra	te increases annua	lly if ex	tended.				
2018	1.75% - 2.25%		3,750,000		3,684,225		-		-
Step-Up Notes -	extendable to 2023. Inte	rest ra	te increases annua	lly if ex	tended.				
2018	1.6% - 1.85%		2,750,000		2,681,628		-		-
Total Endowmer	t Fund	\$	40,654,684	\$	40,354,194	\$	32,464,334	\$	32,364,283

INVESTMENT IN DEBT INSTRUMENTS (CONTINUED)

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Investment Type & Maturity	Effective Interest Rates	2017				20	016		
		An	nortized Cost	N	larket Value	Amortized Cost		Amortized Cost M	
Wheat Fund:									
Corporate Long	Bond Bear Note								
2019	0.80% (*)	\$	2,000,000	\$	1,968,892	\$	2,000,000	\$	1,988,574
Guaranteed Inve	stment Certificates								
2017	1.65% - 2.36%		-		-		4,295,000		4,295,000
2018	1.35% - 2.50%		3,525,000		3,525,000		2,650,000		2,650,000
2019	1.55% - 2.37%		1,275,000		1,275,000		700,000		700,000
2020	2.60%		100,000		100,000		-		-
Step-Up Note -	extendable to 2021. Inte	erest rat	e increases 0.25%	annua	lly if extended.				
2018	1.75%		250,000		246,375		250,000		250,000
Step-Up Note -	extendable to 2022. Inte	erest rat	e increases 0.25%	annua	lly if extended.				
2018	1.75%		600,000		589,257		-		-
Step-Up Note -	extendable to 2023. Inte	erest rat	e increases annua	lly if ext	tended.				
2018	1.5% - 1.6%		500,000		488,485		-		-
Total Wheat Fu	nd	\$	8,250,000	\$	8,193,009	\$	9,895,000	\$	9,883,574
Barley Fund:									
Guaranteed Inve	estment Certificates								
2017	1.80% - 2.02%	\$	-	\$	-	\$	415,000	\$	415,000
2018	1.50% - 2.01%		285,000		285,000		110,000		110,000
2019	1.71% - 2.36%		175,000		175,000		-		-
2020	1.85%		50,000		50,000		-		-
Total Barley Fu	nd		510,000		510,000		525,000		525,000
Total All Funds		\$	49,414,684	\$	49,057,203	\$	42,884,334	\$	42,772,857

*Corporate Long Bond Bear Notes provide 0.80% coupon rate plus a provision for additional return based on the long term bond index at maturity date.

ACCUMULATED UNREALIZED GAINS

A. INVESTMENT IN EQUITY SECURITIES

Endowment Fund Equities		2017	2016
Change in unrealized gains during the year	\$	8,788,484	\$ 2,973,330
Recognition of realized gains during the year		(3,383,393)	(2,027,766)
		5,405,091	 945,564
Unrealized gains in opening fund balance		13,269,691	12,324,127
	\$	18,674,782	\$ 13,269,691
Wheat Fund Equities		2017	2016
Change in unrealized gains during the year	\$	2,176,376	\$ 687,208
Recognition of realized gains during the year		(499,737)	(45,798)
		1,676,639	 641,410
Unrealized gains in opening fund balance		2,227,236	1,585,826
	\$	3,903,875	\$ 2,227,236
Barley Fund Equities		2017	2016
Change in unrealized gains during the year	\$	172,250	\$ 55,016
Recognition of realized gains during the year		(53,031)	(20,470)
		119,219	 34,546
Unrealized gains in opening fund balance		197,184	162,638
	\$	316,403	\$ 197,184
Total, All Funds		2017	2016
Change in unrealized gains during the year	\$	11,137,110	\$ 3,715,554
Recognition of realized gains during the year		(3,936,161)	(2,094,034)
		7,200,949	 1,621,520
Unrealized gains in opening fund balance		15,694,111	14,072,591
	\$	22,895,060	\$ 15,694,111

FOR THE YEAR ENDED DECEMBER 31, 2017

ACCUMULATED UNREALIZED GAINS

B. INVESTMENT IN BOND EXCHANGE TRADED FUNDS

Endowment Fund ETF's		2017	2016
Change in unrealized gains during the year	\$	(20,601)	\$ -
Recognition of realized gains during the year		-	-
		(20,601)	 -
Unrealized gains in opening fund balance		-	-
	\$	(20,601)	\$ -
Wheat Fund ETF's		2017	2016
Change in unrealized gains during the year	\$	(40,499)	\$ -
Recognition of realized gains during the year		-	-
		(40,499)	 -
Unrealized gains in opening fund balance		-	 -
	\$	(40,499)	\$ -
Barley Fund ETF's		2017	2016
Change in unrealized gains during the year	\$	(1,082)	\$
Recognition of realized gains during the year		-	-
		(1,082)	 -
Unrealized gains in opening fund balance		-	-
	\$	(1,082)	\$ -
Total, All Funds		2017	2016
Change in unrealized gains during the year	\$	(62,182)	\$ -
Recognition of realized gains during the year		-	-
		(62,182)	 -
Unrealized gains in opening fund balance		-	 -
	\$	(62,182)	\$ -
Total, All Funds		2017	2016
Change in unrealized gains during the year	\$	11,074,928	\$ 3,715,554
Recognition of realized gains during the year		(3,936,161)	(2,094,034)
		7,138,767	 1,621,520
Unrealized gains in opening fund balance		15,694,111	14,072,591
	\$	22,832,878	\$ 15,694,111

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WESTERN GRAINS RESEARCH FOUNDATION

C. TOTAL ACCUMULATED

UNREALIZED GAINS ON EQUITY INVESTMENTS & BOND EXCHANGE TRADED FUNDS

OTHER INCOME Endowment Fund	2017	2016
CTA order for CN Rail for exceeding its Maximum Revenue Entitlement for grain movement for 2016-17	\$ 6,062,428	\$ -
CTA order for CP Rail for exceeding its Maximum Revenue Entitlement for grain movement for 2016-17	1,132,894	-
CTA order for CN Rail for exceeding its Maximum Revenue Entitlement for grain movement for 2015-16	-	1,094,009
CTA order for CP Rail for exceeding its Maximum Revenue Entitlement for grain movement for 2015-16	-	3,555,807
Agriculture & Agri-Food Canada funding for research under the Systems Approach to Agronomy research program	249,785	333,071
Agriculture & Agri-Food Canada funding for project management under the Systems Approach to Agronomy research program	30,357	30,357
	\$ 7,475,464	\$ 5,013,244
Wheat Fund	2017	2016
CFCRA Funding for research under the National Wheat Improvement Program	\$ 347,187	\$ 347,187
Alberta Wheat Commission Funding for research under the National Wheat Improvement Program	269,120	269,120
Agriculture & Agri-Food Canada funding for research under the National Wheat Improvement Plan research program	100,702	99,600
Agriculture & Agri-Food Canada funding for project management under the National Wheat Improvement Plan research program	1,266,853	813,318
	\$ 1,983,862	\$ 1,529,225
Barley Fund	2017	2016
Funding was received from the following organizations under a research funding agreement with the U of S:		
Sask Barley Commission	\$ 90,000	\$ 180,000
Manitoba Wheat & Barley Growers Association	5,000	10,000
Alberta Barley Commission	5,000	 -
	\$ 100,000	\$ 190,000
	\$ 9,559,326	\$ 6,732,469

COMMITMENTS

MENTS The Foundation has approved and is committed to certain research funding over the next five years as follows:

Year	Endowment Fund	Wheat Fund	Barley Fund	Total
2018	\$ 6,317,374	\$ 8,368,728	\$ 918,185	\$ 15,604,287
2019	4,033,475	6,250,450	811,336	11,095,261
2020	2,925,071	2,349,962	347,192	5,622,225
2021	2,223,966	541,062	150,000	2,915,028
2022	1,801,044	500,000	150,000	2,451,044
Thereafter	 370,250	 125,000	 37,500	 532,750
	\$ 17,671,179	\$ 18,135,202	\$ 2,414,213	\$ 38,220,594

OPERATING LEASE

The lease for the office space occupied by the Foundation in 2017 expires March 31, 2018. The Foundation has entered into a new three year lease agreement beginning April 1, 2018. The minimum annual lease payments under the new operating lease that expires March 31, 2021 is \$116,114 plus Goods and Services tax.

Annual payments due in each of the next four years are as follows:	
2018	\$ 115,004
2019	118,038
2020	121,244
2021	30,525

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FOR THE YEAR ENDED DECEMBER 31, 2017

FINANCIAL INSTRUMENTS

The Foundation's recognized financial assets and liabilities consist of cash, cash and cash equivalents, accounts receivable, accrued interest receivable, investment in debt instruments, investment in equity securities, and accounts payable and accrued liabilities. The fair values of these items approximate their carrying values except for investments in debt instruments, the fair values of which are disclosed in Note 7.

CREDIT RISK

The Foundation is exposed to credit risk with respect to cash, cash and cash equivalents, accounts receivable and the accrued interest receivable. The Foundation assesses, on a continuous basis, accounts receivable on the basis of amounts it is virtually certain to receive. The credit risk with respect to cash and cash equivalents is insignificant since they are held in large financial institutions and is limited to the carrying amounts reported on the statement of financial position.

INTEREST RATE RISK

The Foundation is exposed to interest rate risk on its fixed and floating interest rate financial instruments. Fixed-rate instruments subject the Foundation to a fair value risk while the floating rate instruments subject it to a cash flow risk. The Foundation is exposed to this type of risk as a result of investments in debt securities.

OTHER PRICE RISK

Other price risk associated with investments in equity securities is the risk that their fair value will fluctuate because of changes in market prices. The Foundation mitigates this risk by regularly rebalancing its portfolio.

ADJUSTMENT BETWEEN ENDOWMENT FUND & BARLEY FUND

The Foundation provided a total of \$1,449,371 of funding to the Alberta Barley Commission over 2013 to 2017 for the Barley Cluster. The entire expenditure was originally charged to WGRF's Barley Fund Research expenditure. In 2017 \$437,641 was reallocated to the Endowment Fund Research Expenditure. This amount represents the portion of the funding that supported agronomy, pathology and value-added project funding. This one-time adjustment corrects the allocation between funds from 2013 to 2017.



