

2021



# WGRF

*Advancing Agriculture through Research*

## ANNUAL REPORT



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## 2021 ANNUAL REPORT

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## Vision

**Profitable and sustainable western  
Canadian grain farmers**

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## Mission

**Producers directing investments  
into crop research to  
benefit western Canadian grain farmers**

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600+

PROJECTS LISTED ON  
WGRF.CA



## ONLINE SEARCH TOOL

More than 600 WGRF-funded research projects are listed at [wgrf.ca](http://wgrf.ca) 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.



WGRC

# RESEARCH PRIORITIES

Priority areas for single crop and cross-cutting crop research

## ELIGIBLE CROPS



Barley



Canary seed



Canola



Chickpea



Corn



Faba bean



Flax



Lentil



Mustard



Oats



Pea



Soybean



Sunflower



Wheat



Winter cereals

## SINGLE CROP RESEARCH PRIORITIES

### Variety development



e.g., genetics, breeding methods, pre-breeding, breeding, pest resistance development, breeding for crop quality, variety trialing

### Production



e.g., cropping systems, crop nutrition, pest (insect, disease, weed) management, production management, soil quality, water use efficiency, fertilizer use efficiency, adaptation to and mitigation of climate change, crop quality, storage, storage pests, economic analysis



## CROSS-CUTTING CROP RESEARCH PRIORITIES

WGRF's priorities for research in cross-cutting crop production issues are an outcome of the Future Field Crop Research Needs process, launched in January 2021 as part of WGRF's 40<sup>th</sup> anniversary. Over 300 farmers, agronomists, scientists, funding agencies and WGRF Members participated in a series of interviews, discussion groups and workshops. WGRF considers "cross-cutting crop production issues" as those issues common to at least two or more of the fifteen crops eligible for WGRF funding (barley, canary seed, canola, chickpea, corn, faba bean, flax, lentil, mustard, oats, pea, soybean, sunflower, wheat and winter cereals).

### The priorities are comprised:



#### The six themes are:

- Weed management
- Disease management
- Insect pest management
- Plant nutrition
- Response to weather variability and climate change
- Sustainable resource management



# CHAIR MESSAGE



**DR. KEITH DEGENHARDT**  
Chair, WGRF

When the Western Grains Research Foundation (WGRF) was created in 1981, the mandate was clear – farmer-funded, farmer-directed crop research to benefit western Canadian grain farmers.

Today, 18 farmers who grow a mix of more than 30 crops across various soil zones throughout Western Canada make up the current Board of Directors. The diversity of their farming experiences, regional locations, soil textures and crops provides great perspective for the Board to direct investments into research projects that show the most potential to benefit western Canadian grain farmers.

To maintain scientific advances at the rate required by today's producers, it's important for prairie-based researchers to have the tools they need to stay ahead of the curve. Through WGRF's Capacity-building Initiatives, equipment, buildings and people are being established across Western Canada to increase research capacity for many decades (see sidebar).

WGRF also proudly supports the next generation of crop researchers. Since 2011, WGRF has invested over \$1 million in more than 20 graduate student scholarships at the Universities of Manitoba, Alberta, and Saskatchewan. I'm excited to announce that we've expanded our graduate student scholarship program to include the Universities of Lethbridge and British Columbia.



In January 2021, we launched Future Field Crop Research Needs process as part of WGRF's 40th anniversary. Over 300 farmers, agronomists, scientists, funding agencies and WGRF Class A Members participated in the initiative that wrapped up in November. Out of this, WGRF developed cross-cutting crop research priorities comprised of six themes, 17 issues and 66 research questions. WGRF has a unique role to play in helping provide producers with answers to these questions that will ultimately benefit their operation, no matter what crop they grow.

It has been an honour to serve as WGRF Board Chair again this year. It is very rewarding to work together with my fellow Board members and WGRF staff to make a positive difference for western Canadian grain farmers.

*Dr. Keith J. Degenhardt*

**DR. KEITH DEGENHARDT**  
Chair, WGRF

## **WGRF is pleased to help fund research equipment and infrastructure for these organizations in 2021:**

- **Agriculture and Agri-Food Canada** (\$3,300,000)
- **Chinook Applied Research Association** (\$266,942)
- **Conservation Learning Centre** (\$266,931)
- **Parkland Regional College** (\$60,440)
- **Farming Smarter** (\$253,000)
- **Gateway Research Organization** (\$293,492)
- **Indian Head Research Foundation** (\$727,470)
- **Mackenzie Applied Research Association** (\$300,000)
- **University of Alberta Breton Plots** (\$284,000)
- **University of Alberta Wheat Breeding Program** (\$288,550)
- **University of Saskatchewan Insect Research Facility** (\$500,000)
- **Additional projects to be announced** (\$17.5M)



# EXECUTIVE DIRECTOR MESSAGE



**GARTH PATTERSON**  
Executive Director, WGRF

WGRF is a unique organization focused solely on funding research for the benefit of western Canadian farmers. Since 1981, WGRF has funded more than \$210 million of research in field crops. The Board consists of 18 Directors, all farmers from across Western Canada including British Columbia, Alberta, Saskatchewan and Manitoba. Directors are elected to the Board annually by WGRF's 18 Member Organizations.

Over our first 40 years, we've evolved to be the largest producer funder of crop research in Canada. WGRF's annual research funding (five-year average) has nearly tripled to \$12.8 million in the past 20 years. Our scope of interest is large, covering 15 prairie crops in the areas of variety development and production for both single crop and cross-cutting crop issues of interest to farmers.

Effective governance supported by well-developed policies, competitive application processes and science-based decision making has been foundational to WGRF's success. Board direction based on a strategic plan and clear funding framework enables implementation of a management plan and execution of the approved funding decisions by staff.

WGRF has played a leadership role in the transformation of the provincially based crop research funding processes to a prairie-wide collaborative effort. Most producer and public crop research funding organizations now recognize the benefits of this approach in the assessment, funding and



# LARGEST PRODUCER FUNDER OF CROP RESEARCH IN CANADA

administration of research. I believe this results in better informed decision making, more efficient use of resources and strengthened relationships between organizations.

Technology transfer is critical for conveying research results to agronomists and farmers. WGRF continues to sponsor the leading industry events focused on extension and knowledge transfer. Our innovative approach to the development of new tools has resulted in programs including Field Heroes, Canadian Agronomist and the Prairie Pest Monitoring Network.

WGRF, like everyone, was impacted by COVID-19 over the past two years. I would like to commend WGRF's dedicated staff for their efforts in adapting to the ever-changing situation while continuing to ensure the important work we do for farmers continued.

Over the past eleven years it has been an honour and a privilege to serve the Board of Directors and be part of a creative and committed team of employees. I believe that WGRF has a bright future and will continue to be a leading funder of crop research and crop research capacity for the benefit of prairie farmers.

**GARTH PATTERSON, M.Sc., PAg**  
Executive Director, WGRF

2021

# BOARD OF DIRECTORS

**DR. KEITH DEGENHARDT**

Hughenden, AB *Chair*

**STEWART WELLS**

Swift Current, SK *Vice-Chair*

**BILL GEHL**

Regina, SK

**BILL PRYBYLSKI**

Willowbrook, SK

**BRUCE DALGARNO**

Newdale, MB

**DICK WYMENGA**

Leslieville, AB

**DOUG MARTIN**

East Selkirk, MB

**GREG SUNDQUIST**

Watrous, SK

**JASON SKOTHEIM**

Spruce Home, SK

**JEFF NIELSEN**

Olds, AB

**JILL VERWEY**

Portage la Prairie, MB

**JOE RENNICK**

Milestone, SK

**KENTON POSSBERG**

Humboldt, SK

**MALCOLM ODERMATT**

Fort St. John, BC

**MARK AKINS**

Hearne, SK

**MIKE AMMETER**

Sylvan Lake, AB

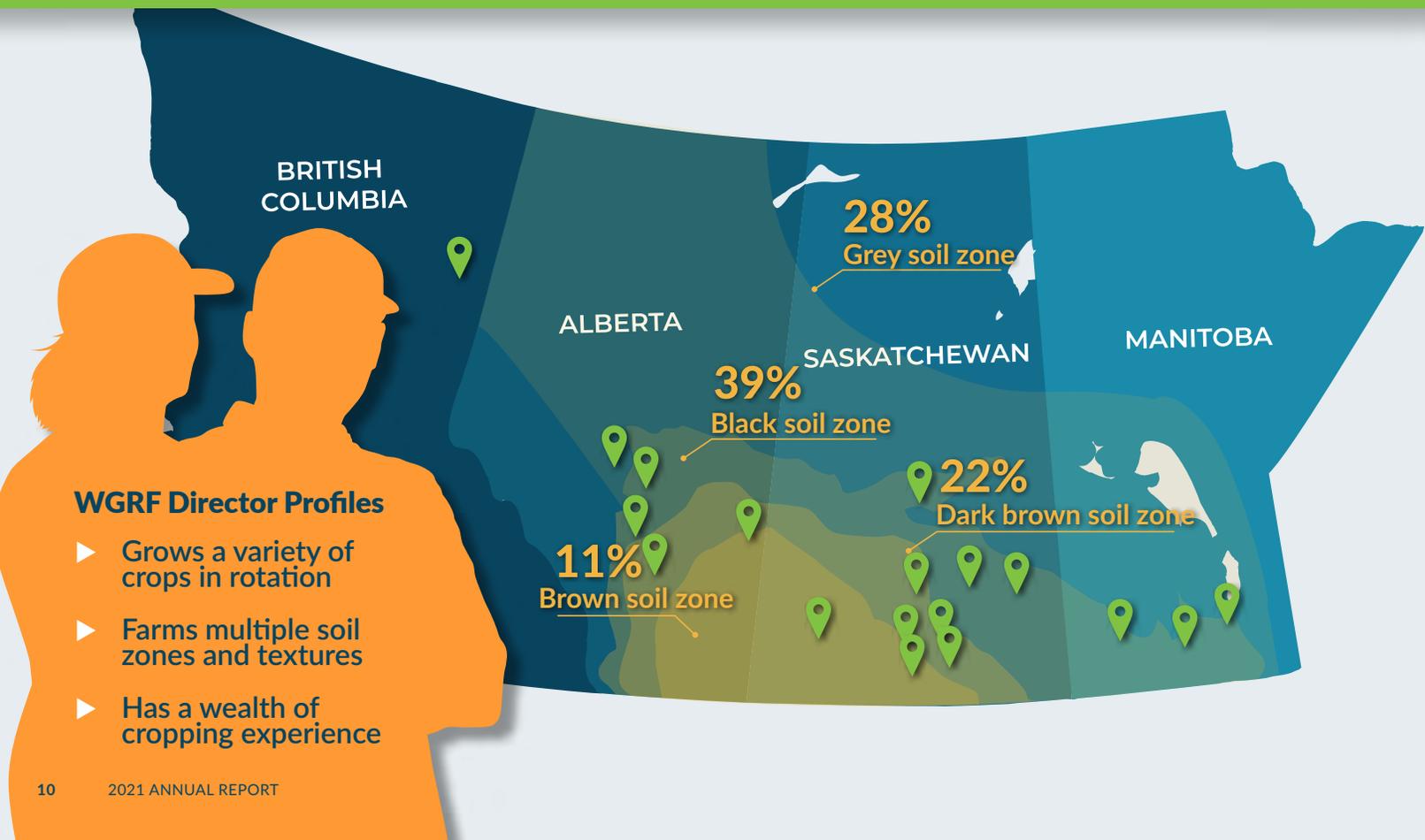
**TERRY YOUNG**

Lacombe, AB

**WADE HAINSTOCK**

Moose Jaw, SK

## BOARD REPRESENTATION ACROSS ALL PROVINCES AND SOIL ZONES



# WGFR MEMBER ORGANIZATIONS

The WGFR 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

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 Crop Alliance  
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 MEMBER

Agriculture and Agri-Food Canada

# WGFR STAFF

**GARTH PATTERSON**, M.Sc., PAg  
Executive Director

**CANDICE LAJEUNESSE**  
Program Administrator

**GLENDA HETTERLY**, CPA, CA  
Finance Manager

**JOELLE HARRIS**, B.S.A., PAg  
Research Program Manager

**LISA JATEGAONKAR**, M.Sc., AAg  
Research Program Manager

**MIKE ESPESETH**, B. Comm.  
Communications Manager

**PAT FLATEN**, M.Sc., PAg  
Research Program Manager

**VALAR GURUSAMY**, Ph.D., AAg  
Research Program Manager



Advancing Agriculture through Research

Investing in crop research to benefit western Canadian grain farmers

**\$210M**

INVESTED IN RESEARCH SINCE 1981

**\$53M**

IN RESEARCH FUNDING OVER NEXT FOUR YEARS



**\$24M**

in infrastructure and tools to help organizations conduct research



**\$8M**



to establish Research Chairs at the Universities of Alberta, Saskatchewan and Manitoba



Dr. Linda Gorim



Dr. Maryse Bourgault



Dr. Mario Tenuta

**\$1.1M**

in Graduate Student Scholarships since 2011 to develop the next generation of researchers



Brianna Zoerb  
U of S



Dustin Maclean  
U of S



Berenice Romero  
U of S



Heather Tso  
U of A



Khaldoun Ali  
U of S



Andrea De Roo  
U of S



Udeya Subedi  
U of A



Erin Daly  
U of A



Jagroop Gill  
U of A



Sean Asselin  
U of M



Hansanee Fernando  
U of S

For a complete list of recipients: [wgrf.ca/special-initiatives/graduate-scholarship/](http://wgrf.ca/special-initiatives/graduate-scholarship/)

# FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2021

# INDEPENDENT AUDITORS' REPORT

## Lingard + Dreger

CHARTERED PROFESSIONAL ACCOUNTANTS

880 Broadway Ave #200 T 306-244-0808  
Saskatoon, SK S7N 3A7 F 306-244-0004  
W lingarddreger.ca

### MAX LINGARD

B. Comm., MPAcc., CPA, CA

### BRENDEN DREGER

CPA

### LARRY SAFINUK

B. Comm., CPA, CA

## To the Directors of Western Grains Research Foundation

### Qualified Opinion

We have audited the financial statements of Western Grains Research Foundation (the Foundation), which comprise the statement of financial position as at December 31, 2021, and the statements of operations and changes in fund balances, and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, except for the possible effects of the matter described in the *Basis for Qualified Opinion* paragraph, the accompanying financial statements present fairly, in all material respects, the financial position of the Foundation as at December 31, 2021, 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.

### Basis for Qualified Opinion

The Foundation derives part of its earnings from payments from 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 royalties, excess of revenue over expenditures, and cash flows from operations for the years ended December 31, 2021, and December 31, 2020, current assets as of December 31, 2021, and December 31, 2020, and fund balances as at January 1 and December 31, for both the 2021 and 2020 years.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Foundation in accordance with the 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 qualified audit 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 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 misstatement, whether due to fraud or error.

In preparing financial statements, management is responsible for assessing the Foundation'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 Foundation or to cease operations, or has no realistic alternative but to do so.

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

## Auditors' 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 auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but it 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.

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 Foundation'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 Foundation's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' 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 auditors' report.

However, future events or conditions may cause the Foundation 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.

*Lingard + Dreger*

### Chartered Professional Accountants

March 7, 2022  
Saskatoon, Saskatchewan

## STATEMENT OF

AS AT DECEMBER 31, 2021

**FINANCIAL POSITION**

<b>CURRENT ASSETS</b>	2021	2020
Cash	573,121	56,807
Cash and cash equivalents (Note 3)	16,038,981	19,313,901
Accounts receivable (Note 6)	1,429,452	3,267,900
Prepaid expenses	31,624	7,655
Investments in debt instruments, short-term (Note 7)	12,125,000	16,108,800
Investments in fixed income funds	3,842,716	4,029,228
Investments in equity securities	121,611,472	102,269,838
	<b>\$ 155,652,366</b>	<b>\$ 145,054,129</b>
Investments in debt instruments, long-term (Note 7)	47,572,499	40,346,810
	<b>\$ 203,224,865</b>	<b>\$ 185,400,939</b>
<b>CURRENT LIABILITIES</b>		
Accounts payable and accrued liabilities	36,258	53,445
<b>FUND BALANCES (Notes 4, 11)</b>		
Capital Fund	9,066,972	9,066,972
Research Fund (Schedule 1)	159,773,951	145,522,124
Wheat Fund (Schedule 2)	31,745,843	28,555,940
Barley Fund (Schedule 3)	2,601,841	2,202,458
	<b>\$ 203,188,607</b>	<b>\$ 185,347,494</b>
See accompanying notes	<b>\$ 203,224,865</b>	<b>\$ 185,400,939</b>

APPROVED BY THE BOARD:



**DR. KEITH DEGENHARDT**  
Chair



**STEWART WELLS**  
Vice-Chair

## STATEMENT OF

FOR THE YEAR ENDED DECEMBER 31, 2021

**OPERATIONS AND CHANGES IN FUND BALANCES****REVENUES**

	2021	2020
Unrealized gain on investments (Note 8)	20,453,193	5,964,247
Investment income	3,748,555	4,041,235
Other income (Note 10)	3,693,466	6,698,576
Royalties (Note 9)	2,725,282	2,748,201
Gain (loss) on sale of investments (Note 8)	1,877,096	(2,485,834)
Foreign exchange loss	(24,859)	(47,226)
	<b>\$ 32,472,733</b>	<b>\$ 16,919,199</b>

**EXPENDITURES**

Research funding	12,050,757	7,616,747
Investment management fees	585,157	527,231
Operating and program expenses (Schedule 4)	1,995,706	1,720,049
Royalty research funding	-	93,354
	<b>\$ 14,631,620</b>	<b>\$ 9,957,381</b>

Excess of revenue over expenditures for the year	17,841,113	6,961,818
Fund balances, beginning of year	185,347,494	178,385,676

**FUND BALANCES, END OF YEAR**

	<b>\$ 203,188,607</b>	<b>\$ 185,347,494</b>
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See accompanying notes

## STATEMENT OF

FOR THE YEAR ENDED DECEMBER 31, 2021

**CASH FLOWS****CASH FLOWS FROM (USED IN)  
OPERATING ACTIVITIES**

	2021	2020
Excess of revenue over expenditures for the year	17,841,113	6,961,818
Items not affecting cash		
Unrealized gain on investments	(20,453,193)	(5,964,247)
Amortization of net premiums on bonds	(685)	(734)
Gain (loss) on sale of investments	(1,877,096)	2,485,834
Changes in non-cash working capital	1,797,292	(1,372,654)
	<b>\$ (2,692,569)</b>	<b>\$ 2,110,017</b>

**CASH FLOWS FROM (USED IN)  
INVESTING ACTIVITIES**

Purchase of investments	(28,064,985)	(44,328,334)
Proceeds on investments redeemed	27,998,948	47,482,248
	<b>(66,037)</b>	<b>3,153,914</b>
(Decrease) increase in cash during the year	<b>(2,758,606)</b>	<b>5,263,931</b>
Cash position, beginning of year	19,370,708	14,106,777
<b>CASH POSITION, END OF YEAR</b>	<b>\$ 16,612,102</b>	<b>\$ 19,370,708</b>

**CASH IS COMPRISED OF**

Cash	573,121	56,807
Cash and cash equivalents	16,038,981	19,313,901
	<b>\$ 16,612,102</b>	<b>\$ 19,370,708</b>

See accompanying notes

## RESEARCH FUND OPERATIONS AND CHANGES IN FUND BALANCE

<b>REVENUES</b>	2021	2020
Investment income	3,142,961	3,393,899
Other income (Note 10)	3,693,466	6,698,576
Gain (loss) on sale of investments (Note 8)	1,027,834	(2,353,709)
Unrealized gain on investments (Note 8)	17,935,201	5,231,007
Foreign exchange loss	(15,154)	(52,353)
	<b>\$ 25,784,308</b>	<b>\$ 12,917,420</b>
 <b>EXPENDITURES</b>		
<b>RESEARCH FUNDING</b>		
Variety Development	2,132,389	1,344,395
Agronomy	3,758,580	2,033,220
Post Harvest Management	(3,105)	(13,447)
Agronomy Capacity	3,596,750	1,695,149
	<b>\$ 9,484,614</b>	<b>\$ 5,059,317</b>
Investment management fees	488,254	438,947
Operating and program expenses (Schedule 4)	1,559,613	1,283,466
	<b>\$ 11,532,481</b>	<b>\$ 6,781,730</b>
Excess of revenue over expenditures for the year	14,251,827	6,135,690
Research fund, beginning of year (Note 4)	145,522,124	139,386,434
<b>RESEARCH FUND, END OF YEAR</b>	<b>\$ 159,773,951</b>	<b>\$ 145,522,124</b>

See accompanying notes

# WHEAT FUND OPERATIONS AND CHANGES IN FUND BALANCE

OPERATING ACCOUNT	2021	2020
<b>REVENUES</b>		
Royalties (Note 9)	2,162,584	2,249,134
Investment income	24	356
	<b>\$ 2,162,608</b>	<b>\$ 2,249,490</b>
<b>EXPENDITURES</b>		
<b>RESEARCH FUNDING</b>		
Agriculture and Agri-Food Canada	263,288	1,049,963
University of Saskatchewan	532,427	370,289
University of Manitoba	200,413	99,131
McGill University	16,184	-
Canadian Wheat Research Coalition	527,784	531,635
University of Alberta	399,347	123,184
Canadian Grains Council	42,000	-
University of British Columbia	200,000	-
	<b>\$ 2,181,443</b>	<b>\$ 2,174,202</b>
Operating and program expenses (Schedule 4)	363,440	373,046
	<b>\$ 2,544,883</b>	<b>\$ 2,547,248</b>
Deficiency of revenue over expenditures for the year	(382,275)	(297,758)
Transfer (to) from wheat reserve account	669,665	(527,359)
Operating account, beginning of year	173,936	999,053
<b>OPERATING ACCOUNT, END OF YEAR</b>	<b>\$ 461,326</b>	<b>\$ 173,936</b>

See accompanying notes

(CONTINUED)

# WHEAT FUND OPERATIONS AND CHANGES IN FUND BALANCE (CONTINUED)

<b>RESERVE ACCOUNT</b>	2021	2020
Investment income	562,788	602,498
Gain (loss) on sale of investments (Note 8)	824,952	(112,701)
Unrealized gain on investments (Note 8)	2,284,780	674,124
Foreign exchange (loss) gain	(10,067)	4,029
Investment management fees	(90,275)	(82,044)
<b>RESERVE NET INCOME FOR THE YEAR</b>	<b>\$ 3,572,178</b>	<b>\$ 1,085,906</b>
Transfer from (to) wheat operating account	(669,665)	527,359
Reserve account, beginning of year	28,382,004	26,768,739
<b>RESERVE ACCOUNT, END OF YEAR</b>	<b>\$ 31,284,517</b>	<b>\$ 28,382,004</b>
<b>WHEAT FUND, END OF YEAR</b>	<b>\$ 31,745,843</b>	<b>\$ 28,555,940</b>

See accompanying notes

## BARLEY FUND OPERATIONS AND CHANGES IN FUND BALANCE

OPERATING ACCOUNT	2021	2020
<b>REVENUES</b>		
Royalties (Note 9)	562,698	499,067
Investment income	5	71
	<b>\$ 562,703</b>	<b>\$ 499,138</b>
<b>EXPENDITURES</b>		
<b>RESEARCH FUNDING</b>		
Barley Council of Canada	147,107	151,612
Agriculture and Agri-Food Canada	39,252	71,156
University of Saskatchewan	132,786	126,036
Indian Head Agricultural Research Foundation	29,888	29,302
McGill University	5,111	-
National Research Council	30,556	5,122
	<b>\$ 384,700</b>	<b>\$ 383,228</b>
Royalty Research Funding	-	93,354
Operating and program expenses (Schedule 4)	72,653	63,537
	<b>\$ 457,353</b>	<b>\$ 540,119</b>
Excess (deficiency) of expenditures over revenue for the year	105,350	(40,981)
Transfer from barley reserve account	80,283	189,388
Operating account, beginning of year	200,728	52,321
<b>OPERATING ACCOUNT, END OF YEAR</b>	<b>\$ 386,361</b>	<b>\$ 200,728</b>

(CONTINUED)

## SCHEDULE 3

FOR THE YEAR ENDED DECEMBER 31, 2021

## BARLEY FUND OPERATIONS AND CHANGES IN FUND BALANCE (CONTINUED)

RESERVE ACCOUNT	2021	2020
Investment income	42,777	44,411
Gain (loss) on sale of investments (Note 8)	24,310	(19,424)
Unrealized gain on investments (Note 8)	233,212	59,116
Foreign exchange gain	362	1,098
Investment management fees	(6,628)	(6,240)
<b>RESERVE NET INCOME FOR THE YEAR</b>	<b>\$ 294,033</b>	<b>\$ 78,961</b>
Transfer to barley operating account	(80,283)	(189,388)
Reserve account, beginning of year	2,001,730	2,112,157
<b>RESERVE ACCOUNT, END OF YEAR</b>	<b>\$ 2,215,480</b>	<b>\$ 2,001,730</b>
<b>BARLEY FUND, END OF YEAR</b>	<b>\$ 2,601,841</b>	<b>\$ 2,202,458</b>

See accompanying notes

## SCHEDULE 4

FOR THE YEAR ENDED DECEMBER 31, 2021

## OPERATING AND PROGRAM EXPENDITURES

EXPENDITURES	RESEARCH FUND	WHEAT FUND	BARLEY FUND	2021	2020
Wages and benefits	695,045	248,230	49,646	992,921	865,190
Communications	243,303	40,805	8,161	292,269	296,356
Scholarships	300,000	-	-	300,000	221,200
Office (Note 12)	142,355	50,842	10,168	203,365	191,297
Professional fees	23,820	6,472	1,295	31,587	42,470
Consulting fees	82,441	6,626	1,325	90,392	8,000
Travel and other	10,036	3,584	717	14,337	36,476
Directors per diems	62,613	6,881	1,341	70,835	59,060
<b>OPERATING AND PROGRAM EXPENDITURES FOR THE YEAR</b>	<b>\$ 1,559,613</b>	<b>\$ 363,440</b>	<b>\$ 72,653</b>	<b>\$ 1,995,706</b>	<b>\$ 1,720,049</b>

NOTES TO THE  
**FINANCIAL STATEMENTS**  
FOR THE YEAR ENDED DECEMBER 31, 2021

# FINANCIAL STATEMENTS

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## 1. 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.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements have been prepared in accordance with Canadian accounting standards for not-for-profit organizations 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 and fixed income funds, is recognized as income of the respective reserve account in the year earned.

Historically, revenue earned by the wheat and barley funds was primarily comprised of payments received from producers as detailed in Note 4.

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) RESEARCH FUND

Investment income, including any unrealized changes in fair value in equity securities and fixed income 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 Maximum Revenue Entitlement ("MRE") for movement of grain in Western Canada. This revenue is recognized and recorded as other income in the Research Fund operations when the amount is known and collection is reasonably assured. In 2021 CN paid the Foundation \$2,519,660 (Note 10) and CP paid the Foundation \$0 as per the CTA award for the 2020/21 crop year (Note 10). In 2020 CN paid the Foundation \$3,329,146 (Note 10) and CP paid the Foundation \$2,278,511 as per the CTA award for the 2019/20 crop year (Note 10).

### 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.

(CONTINUED)

# FINANCIAL STATEMENTS

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## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### 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.

### 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 fixed income 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 Canadian accounting standards for not-for-profit organizations 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. Significant estimates include, but are not limited to, accruals for certain revenues.

## 3. CASH AND CASH EQUIVALENTS

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



# FINANCIAL STATEMENTS

## 7. INVESTMENT IN DEBT INSTRUMENTS

Investment Type & Maturity	Effective Interest Rates	2021		2020	
		Amortized Cost	Market Value	Amortized Cost	Market Value
<b>RESEARCH FUND:</b>					
CORPORATE EXTENDIBLE BONDS					
2021	Floating rates	-	-	2,258,800	2,271,000
2026	1.67%	2,000,000	2,000,000	2,000,000	2,000,000
2027	1.35% - 1.55%	8,500,000	8,500,000	6,000,000	6,000,000
2028	1.55% - 2.2%	3,000,000	3,000,000	1,000,000	1,000,000
2029	1.95%	2,000,000	2,000,000	-	-
2030	1.8% - 1.9%	3,000,000	3,000,000	3,000,000	3,000,000
PROVINCIAL BONDS					
2025	2.30% - 2.38%	2,997,499	3,075,552	2,996,810	3,198,945
GUARANTEED INVESTMENT CERTIFICATES					
2021	2.05% - 3.26%	-	-	11,250,000	11,250,000
2022	0.91% - 3.38%	9,800,000	9,800,000	9,800,000	9,800,000
2023	1.08% - 3.35%	7,500,000	7,500,000	6,000,000	6,000,000
2024	1.05% - 2.3%	5,000,000	5,000,000	2,500,000	2,500,000
2025	1.2% - 1.95%	2,500,000	2,500,000	500,000	500,000
2026	1.65% - 2.05%	750,000	750,000	-	-
Range Accrual Deposit Notes, extendible to 2029. Interest paid if daily CDOR rate between 0% and 1.5%.					
2029	2.25%	2,500,000	2,500,000	-	-
<b>TOTAL RESEARCH FUND</b>		<b>\$ 49,547,499</b>	<b>\$ 49,625,552</b>	<b>\$ 47,305,610</b>	<b>\$ 47,519,945</b>

(CONTINUED)

# FINANCIAL STATEMENTS

## 7. INVESTMENT IN DEBT INSTRUMENTS (CONTINUED)

Investment Type & Maturity	Effective Interest Rates	2021		2020	
		Amortized Cost	Market Value	Amortized Cost	Market Value
<b>WHEAT FUND:</b>					
CORPORATE EXTENDIBLE BONDS					
2021	Floating rate	-	-	200,000	199,786
2026	1.67%	500,000	500,000	500,000	500,000
2027	1.35% - 1.55%	2,275,000	2,275,000	1,775,000	1,775,000
2030	1.80%	500,000	500,000	500,000	500,000
GUARANTEED INVESTMENT CERTIFICATES					
2021	1.99% - 3.1%	-	-	2,150,000	2,150,000
2022	0.95% - 3.05%	2,150,000	2,150,000	1,700,000	1,700,000
2023	1.1% - 2.2%	1,300,000	1,300,000	700,000	700,000
2024	1.15% - 2.0%	1,100,000	1,100,000	700,000	700,000
2025	1.21% - 1.95%	800,000	800,000	350,000	350,000
2026	1.75% - 2.05%	450,000	450,000	-	-
Range Accrual Deposit Notes, <i>extendible to 2029. Interest paid if daily CDOR rate between 0% and 1.5%.</i>					
2029	2.25%	500,000	500,000	-	-
<b>TOTAL WHEAT FUND</b>		<b>\$ 9,575,000</b>	<b>\$ 9,575,000</b>	<b>\$ 8,575,000</b>	<b>\$ 8,574,786</b>
<b>BARLEY FUND:</b>					
GUARANTEED INVESTMENT CERTIFICATES					
2021	2.45% - 2.95%	-	-	250,000	250,000
2022	2.20% - 3.07%	175,000	175,000	175,000	175,000
2023	1.23% - 2.3%	200,000	200,000	150,000	150,000
2024	1.45% - 1.57%	100,000	100,000	-	-
2025	1.95% - 2.15%	100,000	100,000	-	-
<b>TOTAL BARLEY FUND</b>		<b>575,000</b>	<b>575,000</b>	<b>575,000</b>	<b>575,000</b>
<b>TOTAL ALL FUNDS</b>		<b>\$ 59,697,499</b>	<b>\$ 59,775,552</b>	<b>\$ 56,455,610</b>	<b>\$ 56,669,731</b>

# FINANCIAL STATEMENTS

8. ACCUMULATED UNREALIZED GAINS	2021	2020
<b>A) INVESTMENT IN EQUITY SECURITIES</b>		
<b>RESEARCH FUND EQUITIES</b>		
Change in unrealized gain during the year	19,053,889	2,822,464
Recognition of realized loss (gain) during the year	(1,056,580)	2,353,709
	<b>\$ 17,997,309</b>	<b>\$ 5,176,173</b>
Unrealized gains in opening fund balance	30,014,577	24,838,404
	<b>\$ 48,011,886</b>	<b>\$ 30,014,577</b>
<b>WHEAT FUND EQUITIES</b>		
Change in unrealized gain during the year	3,169,359	499,450
Recognition of realized loss (gain) during the year	(828,702)	114,800
	<b>\$ 2,340,657</b>	<b>\$ 614,250</b>
Unrealized gains in opening fund balance	4,059,937	3,445,687
	<b>\$ 6,400,594</b>	<b>\$ 4,059,937</b>
<b>BARLEY FUND EQUITIES</b>		
Change in unrealized gain during the year	261,087	37,146
Recognition of realized loss (gain) during the year	(24,686)	19,424
	<b>\$ 236,401</b>	<b>\$ 56,570</b>
Unrealized gains in opening fund balance	320,163	263,593
	<b>\$ 556,564</b>	<b>\$ 320,163</b>
<b>TOTAL EQUITIES, ALL FUNDS</b>		
Change in unrealized gain during the year	22,484,335	3,359,060
Recognition of realized loss (gain) during the year	(1,909,968)	2,487,933
	<b>\$ 20,574,367</b>	<b>\$ 5,846,993</b>
Unrealized gains in opening fund balance	34,394,677	28,547,684
	<b>\$ 54,969,044</b>	<b>\$ 34,394,677</b>

(CONTINUED)

# FINANCIAL STATEMENTS

8. ACCUMULATED UNREALIZED GAINS (CONTINUED)	2021	2020
<b>B) INVESTMENT IN FIXED INCOME FUNDS</b>		
RESEARCH FUND FIXED INCOME FUNDS		
Change in unrealized gain (loss) during the year	(90,854)	54,834
Recognition of realized loss (gain) during the year	28,746	-
	<b>\$ (62,108)</b>	<b>\$ 54,834</b>
Unrealized gain (loss) in opening fund balance	38,881	(15,953)
	<b>\$ (23,227)</b>	<b>\$ 38,881</b>
WHEAT FUND FIXED INCOME FUNDS		
Change in unrealized gain (loss) during the year	(59,627)	61,973
Recognition of realized loss (gain) during the year	3,750	(2,099)
	<b>\$ (55,877)</b>	<b>\$ 59,874</b>
Unrealized gain (loss) in opening fund balance	29,309	(30,565)
	<b>\$ (26,568)</b>	<b>\$ 29,309</b>
BARLEY FUND FIXED INCOME FUNDS		
Change in unrealized gain (loss) during the year	(3,566)	2,546
Recognition of realized loss (gain) during the year	377	-
	(3,189)	2,546
Unrealized gain (loss) in opening fund balance	1,784	(762)
	<b>\$ (1,405)</b>	<b>\$ 1,784</b>
<b>TOTAL FIXED INCOME FUNDS, ALL FUNDS</b>		
Change in unrealized gain (loss) during the year	(154,047)	119,353
Recognition of realized loss (gain) during the year	32,873	(2,099)
	<b>\$ (121,174)</b>	<b>\$ 117,254</b>
Unrealized gain (loss) in opening fund balance	69,974	(47,280)
	<b>\$ (51,200)</b>	<b>\$ 69,974</b>

(CONTINUED)

# FINANCIAL STATEMENTS

8. ACCUMULATED UNREALIZED GAINS (CONTINUED)	2021	2020
C) TOTAL ACCUMULATED UNREALIZED GAINS ON EQUITY INVESTMENTS & FIXED INCOME FUNDS		
TOTAL, ALL FUNDS		
Change in unrealized gain during the year	22,330,288	3,478,413
Recognition of realized loss (gain) during the year	(1,877,095)	2,485,834
	<b>\$ 20,453,193</b>	<b>\$ 5,964,247</b>
Unrealized gains in opening fund balance	34,464,651	28,500,404
	<b>\$ 54,917,844</b>	<b>\$ 34,464,651</b>
9. ROYALTY INCOME		
Royalty Income includes the following:		
WHEAT FUND		
Agriculture & Agri-Food Canada	1,886,776	2,023,287
University of Saskatchewan	273,566	223,217
University of Alberta	2,242	2,630
	<b>\$ 2,162,584</b>	<b>\$ 2,249,134</b>
BARLEY FUND		
Agriculture & Agri-Food Canada	288,409	368,040
University of Saskatchewan	274,289	131,027
	<b>\$ 562,698</b>	<b>\$ 499,067</b>
TOTAL, ALL FUNDS		
Agriculture & Agri-Food Canada	2,175,185	2,391,327
University of Saskatchewan	547,855	354,244
University of Alberta	2,242	2,630
	<b>\$ 2,725,282</b>	<b>\$ 2,748,201</b>

# FINANCIAL STATEMENTS

10. OTHER INCOME	2021	2020
Other income includes the following:		
<b>RESEARCH FUND</b>		
CTA order for CN Rail for exceeding its Maximum Revenue Entitlement for grain movement for 2020-21	2,519,660	-
CTA order for CN Rail for exceeding its Maximum Revenue Entitlement for grain movement for 2019-20	-	3,329,146
CTA order for CP Rail for exceeding its Maximum Revenue Entitlement for grain movement for 2019-20	-	2,278,511
Industry Partner funding for research under the Integrated Crop Agronomy Cluster	294,302	282,851
Agriculture & Agri-Food Canada funding for research under the Integrated Crop Agronomy Cluster	734,644	658,869
Agriculture & Agri-Food Canada funding for program expenses under the Integrated Crop Agronomy Cluster	144,841	149,199
Donation	19	-
	<b>\$ 3,693,466</b>	<b>\$ 6,698,576</b>

# FINANCIAL STATEMENTS

## 11. COMMITMENTS

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

YEAR	RESEARCH FUND	WHEAT FUND	BARLEY FUND	TOTAL
2022	15,854,624	2,192,234	405,900	18,452,758
2023	11,272,619	2,140,940	406,598	13,820,157
2024	6,573,696	1,465,325	315,624	8,354,645
2025	3,107,719	945,289	232,795	4,285,803
2026	895,708	129,291	16,600	1,041,599
Thereafter	944,141	-	-	944,141
	<b>\$ 38,648,507</b>	<b>\$ 6,873,079</b>	<b>\$ 1,377,517</b>	<b>\$ 46,899,103</b>

## 12. OPERATING LEASE

The Foundation leases office space and office equipment. The minimum total lease payments over the next five years is \$579,500 plus Goods and Services Tax.

Annual payments due in each of the next five years are as follows:

2022	132,100
2023	133,800
2024	138,100
2025	140,700
2026	34,800

# FINANCIAL STATEMENTS

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## 13. 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 fixed income funds, investment in equity securities, and accounts payable and accrued liabilities. The carrying values of these items approximate their fair 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 fixed income funds and 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.

## 14. COMPARATIVE FIGURES

Some of the comparative figures have been reclassified to conform to the current year's presentation.

2021



**WGRF**

*Advancing Agriculture through Research*

ANNUAL REPORT

