





# Mission

A leader in "teaching teachers" with sciencebased, curriculum-aligned plant nutrient resources, programs and initiatives. We work collaboratively with others to demonstrate the role of nutrients in plant production and promote solutions for sustainable agriculture and environmental stewardship.

# Vision

The soil beneath our feet is the foundation for world food security. By leading the development and delivery of plant nutrient educational programming we ensure Canadians are informed and contributing to solutions that sustainably grow healthy plants and protect our land, air and water for future generations.



#### **BOARD OF DIRECTORS**

Bob Adamson Chair, Pembina Trails School Division Lindsey Verhaeghe Vice Chair, Nutrien Raymond Carriere Secretary, Green Spaces Consultant Terry Baker Franklin Land and Cattle Company Ltd. Luke Burton J.R. Simplot Dan Doyle Fertilizer Canada Jill Fairbrother FPI Communications Hugh Loomans Sylvite Group of Companies Kier Miller Soil Conservation Council of Canada Isabelle Thibout Corteva Agriscience Gary Vogen Yara

#### PARTNERS

Agriculture in the Classroom Canada Agriculture in the Classroom Prince Edward Island Canada Agriculture and Food Museum Communities in Bloom Compost Council of Canada Farmers Edge Inside Education Manitoba Agriculture, Food and Rural Initiatives Nutrients for Life Foundation USA Prince Edward Island Potato Board Soil Conservation Council of Canada Vanco Farms

#### SPONSORS

Platinum Sponsors	Sil
Nutrien	Ca
Signature Sponsors	Sco
Corteva Agriscience	Syl
Fertilizer Canada	Bre
J. R. Simplot	Ca
Yara	Ma

Silver Sponsors Cargill Scotts Canada Sylvite Bronze Sponsors Cavendish Agri Services MacEwen Agricentres Inc Pembina Trails School Division

## LETTER FROM THE CHAIR

#### Bob Adamson

The Covid-19 pandemic was a global 'shock' that has changed the world's economy and social fabric. The significance of vaccine availability both in Canada and around the world provides us with a sense of hope that the light at the end of the tunnel is actually approaching.

What we cannot overlook in our fight against this pandemic are those issues that were present prior to the outbreak and which will still be with us after we successfully get Covid-19 under control.

As the immediate health consequences of the pandemic unfold and begin to be superseded by the impact of public health containment measures, we call for a refocusing of research and action not only to mitigate these impacts but to build sustainability and strengthened resilience into future recovery.

In my last message, I had noted that the United Nations had provided us with a blueprint of these issues and challenges along with potential solutions through the UN's Sustainable Development goals. At the forefront of the blueprint, is the key role that education must play in our fight for Zero Hunger and Clean Water and Sanitation. Food and Water Security can and will be addressed through education, collaboration and the technologies and innovation that we can bring to bear on finding solutions that will eradicate this other pandemic. Food and Water security is not an issue that is someone else's, but an issue that impacts all of us.

Local communities including urban, rural and our northern neighbors are all impacted. Population growth, urbanization, changing consumption diets, biodiversity loss and climate impacts on our food production systems challenge us in ways that require a systems approach supported by an education network to ensure that we are able to successfully respond to these challenges. The Nutrients for Life Foundation's Mission and Vision sees the path forward being led by a vigorous education approach that not only bring science and technology to bear on the issues but also one that addresses the misconceptions that surround our food production systems,



and which impacts our ability to successfully meet our goal of Food and Water Security for all.

The pandemic has also had a significant impact on how we communicate and work together both locally and globally. I am extremely proud of the work and successes that our Regional Managers and Executive Director have been able to accomplish against all hurdles that Covid-19 has put in our path. With schools going into virtual mode many times this past year, the Foundation's Regional Managers have adapted all of our resources to meet the needs of classroom teachers and students across Canada. Their commitment to providing a science-based program that engages students in understanding both the nature of and their role in fighting for food and water security is commendable. The Foundation programs have continued to offer on-line, print, and visual resources this year. We have taken a giant step forward in our direct delivery outreach through virtual platforms that have allowed us to reach an even broader community of learners. Our programs to communities across Canada assist in a fight for food and water equality that respects a sustainability approach addressing the economic, social and environmental pillars we all embrace.





Our Learning Gardens, which have been established across Canada along with our clear messaging regarding soil and plant health through the 4R Nutrient Stewardship are core to our school/community based active learning programs. We have set ambitious goals to be the leading educational resource for soil health and sustainable land use but acknowledge that our success will be through collaborative partnerships with our core funders, industry partners and a broad educational NGO community that has similar beliefs and goals. This year our Soil Learning Box program has brought in broader support providing outreach and tools to a further sixty schools across Canada. We are expanding our learning garden community and are continuing to support the needs and solutions for northern communities through initiatives led by the Churchill Northern Research Center and their community leaders.

We also have partnered with the Canadian Light Source based in Saskatchewan to support a growing student research community and the Bioscience Association of Manitoba to provide for a workshop series, Stem Skills for the 21st Century that has both a local and global audience. As a Foundation we continue to meet the demands of the educational community and expand our program reach to ensure that we have a network that offers a diverse global perspective so that we are able to make informed decisions that impact on our goal and mission to feed the world and to provide safe drinking water to all.

I continue to look forward to the opportunity to work with our NFL team of educators, Board of Directors and Foundation Partners to ensure that our journey continues to meet the needs of our community. The Board of Directors are passionate about food and water security and bring their full commitment of time and energy to ensure that as a Foundation we can meet the Mission and Vision we have set for our team.

Clamon

### LETTER FROM THE EXECUTIVE DIRECTOR

Tamara Sealy

As we wrap up 2020, this year was unlike any other we have experienced in history. Covid-19 has changed how we communicate, educate, and connect with one another. As we learned very quickly in March as the entire world shut down, Nutrients for Life (NFL Canada) had to quickly adapt to provide useful tools. Teachers, students, and parents across the nation had to learn quickly how to use virtual platforms to connect remotely in an uncertain world.

I am proud of our team for quickly adapting and coming up with new ways to bring soil science and agricultural sustainability topics to teachers and students from coast to coast. 2020 has given us time to reflect on where we were and where we need to be, to provide science-based, and useful resources for Canadian teachers. Working with our partners across the country has been an integral part to continuing to provide our resources to educators. From virtual classroom visits which contain aspects of gaming to create a fun and experiential learning experience, to setting up and hosting virtual booths at various teacher conventions and providing useful tools for online learning our team has come together to continue to spread our vision and mission.

Our board approved a new strategic plan for the next five years and I am excited to see to work with the NFL Board of Directors and staff to expand our reach from British Columbia to Newfoundland and all points in between. As part of our strategic plan, we also refreshed our mission and vision.

During the summer, we hosted teachers from Canada and the United States in a first-ever NFL Virtual Teacher Workshop with over 80 teachers attending for the weeklong session with live and at-home learning. In September, partnered with Vanco Farms and Scotts Canada on a new pilot program to provide Bulbs to Blooms tulip kits. All 25 kits were assigned to classrooms in less than 72



The Foundation learned quickly how to connect with classrooms virtually

hours through our social media platforms. We are looking forward to seeing the new tulips blossom in Spring 2021. Our connections with teachers and students continued with offering virtual classroom visits and participating in teacher conventions virtually. It certainly is a new way to connect, but the staff of NFL Canada has adapted and taken on the new challenge to continue our work to spread our soil and plant science resources.

We look forward to a brand- new year, continuing to provide and coming up with new materials to bring into the classroom either in person or virtually. We would like to thank all of our educators for their continued enthusiasm and dedication to educating our youth, and to our sponsors who believe in our mission to bring such valuable resources to the classroom. Please stay well and have a wonderful 2021!



## OUR SCHOOL GARDEN FAMILY CONTINIES TO GROW

## **2020 SCHOOL LEARNING GARDENS**

Grants were only distributed in Alberta (due to Covid-19)

- Four Winds Public School, Morinville AB
- Heritage Hills Elementary School, Sherwood Park AB
- Our Lady of the Snows School, Canmore AB
- County Central High School, Vulcan AB
- Stavely School, Stavely AB
- Ecole St. Cecelia Junior High School, Edmonton AB
- Mountain View School, Mountain View AB
- Lauderdale School, Edmonton AB
- James Fowler High School, Calgary AB
- Peace Wapiti Academy, Grand Prairie AB
- Wainwright High School, Wainwright AB
- Twelve Mile Coulee School, Calgary AB
- Bluffton School, Bluffton AB







## **GROW MANITOBA**

Kent Lewarne - Regional Manager



What do you get when you place eight kinds of seed, peat pots, soil and a "mini-greenhouse" in the hands of four classrooms across Manitoba? You have Grow Manitoba of course! Nutrients for Life Canada was a proud leader of getting elementary students "growing" (literally) last spring with a spin- off of the Grow Alberta program. Students from four schools in Manitoba, primarily grades 4-6 received NFL Garden Kits to start growing their own food. Herbs like thyme, oregano and basil were planted in the "mini greenhouse" while other seeds like tomatoes, lettuce were started in the peat pots.

Carrots and peas likely went straight into the garden. To spice up the gardens marigolds and alyssum were added to the mix. Parents reported great engagement with this "at home" learning project and it was a welcome addition to their "toolbox" while students were home.







## NUTRIENTS FOR LIFE PARTICIPATES IN THE CULTIVATE 2020 YOUTH AGRICULTURE LEADERSHIP SUMMIT

Ray Cochrane - Regional Manager



Inside Education is an award-winning Alberta based charity organization focusing on the environment and natural resources. It also acts as the provincial hub for the Nutrients for Life Learning Garden program.

On March 5-8th, 2020, Inside Education organized and delivered the Youth Agriculture Leadership Summit at Olds College, Alberta. This topic was put forward was, how can we sustain our growing demand for food and other agriculture products through best practices that maintain the integrity of our water, energy, land, air, and wildlife? School teams comprised from 20 schools took part in a variety of workshops, sessions, and activities to gain an awareness of current issues related to agriculture. The goal was for each team to formulate and implement an Agriculture Education Project action plan engaging their school and community.

As part of this hugely successful summit, Kent and I were invited to participate in the 'Farm to Table – Expert Roundtable' event. This was a highly interactive session with all of the student teams from each of the schools. It was hugely successful with appreciation being expressed by the students, teachers and organizers.

We would like to thank Inside Education for the invite. Not only did we have the opportunity to present some important sustainable agriculture practices, we also gained valuable connections, experience and insight. This came from fellow participants within the various fields of education, agricultural industry, government and the environmental community.



## SOIL DAY GOES VIRTUAL

Kent Lewarne - Regional Manager

Each year Fort Whyte Alive plays host to Soil Science Day, a collaborative effort of Manitoba Agriculture, Nutrients for Life and Fort Whyte Alive. Typical attendance is in the 75- student range. Who would have thought that as we took the event virtual this year that numbers would skyrocket? With well over 200 students connected from across Manitoba, Soil Science Day was an extremely successful virtual event. With the help of Frontier School Divisions live YouTube feed, and the Soil Science Kits compiled by partners and distributed to participating schools, classrooms around Manitoba took part in a number of hands- on soil and water activities! Ray Cochrane from NFL kicked off the day discussing Soil Properties. (hand texturing is always a hit!!)

Next up was Next Kent Lewarne focusing on Nutrients and introducing the 4Rs of Nutrient Stewardship (soil samples and test kits were provided). That rounded out the morning.





Mitchell Timmerman from Manitoba Ag continued on the 4R path with "The Amazing Rain and Snow Show" or TARSS as we know it! While we could not utilize the full -blown trailer demonstration outside, Mitchell quite ably moved indoors utilizing a table-top rain and snow demonstration model. The model highlights the effect of soil type, best management practices and our Canadian climate on agriculture. While we all long to be back face to face next year, there is no doubt that this virtual event has to be considered as a great option for students and schools that are unable to attend in person!

## **2020 IN REVIEW**

#### **1st Virtual Teacher PD Event**

This year NFL Canada and NFL USA partnered for the first time in July to host over 80 teachers from both countries in a week- long virtual event, "Soil", Life's Main Ingredient. Each daily session was an hour and half with guest speakers, hands- on activities and ideas on how to bring soil science to life in the classroom. Each teacher received a "Resource Box" prior to the event with all of the supplies needed for every activity.

Canadian teacher feed-back, "Thanks again for the awesome sessions. It clarified my concepts about fertilizer use, fertilizer science, studies& practice to mitigate possible negative environmental impacts. All the hands-on activities are icing on the cake will transform my classroom practice. Even the way you had kitted everything for the activities was such a good example of what we may have to do!".

#### **NFL Celebrates Earth Day**

To reach students and families during Covid-19, to get them gardening during this difficult time.



#### **Bulbs to Blooms**

25 classroom kits which included 100 tulip bulbs, growing guide and activities (English/French), bone meal and all NFL Canada resources.

Thanks to Vanco Farms and Scotts Canada on partnering in the pilot program.



#### **New Online Game**

Students can sit in our tractor and learn about agricultural sustainability through 4R Nutrient Stewardship.







#### NFL Offers Plants Need to Eat Too Bracelets

To assist teachers with distant learning, NFL was happy to provide our bracelet kits to teachers across the country in May. **The kits reached over 700 students**.

## STRATEGIC PLAN 2020-2025

Roadmap to a Sustainable Future: Executive Summary

			<u> </u>											
Mission NFL Canada is a leader in "teaching teachers" with science-based, curriculum-aligned plant nutrient resources, programs and initiatives. We work collaboratively to demonstrate the role of nutrients in plant production & promote sustainable agriculture and environmental stewardship.				ed	Vision The soil beneath our feet is the foundation for achieving world food security. By leading the development and delivery of plant nutrient educational programming we ensure Canadians are informed and contribute solutions that sustainably grow healthy plants and protect our land, air and water for future generations									
Passion: Our team operates	1			Acc		e Valu	ues							
with a positive attitude and an energetic commitment in connecting the education system with the agricultural industry	the extended expert delive program an ope	ng Learners: We leverage extensive knowledge and ertise in our network to iver the highest quality ams, while operating with pen mind to continuous			Accountability: As a non-profit we are ethically responsible for executing our mission while meeting the needs of our stakeholders internally and externally			Stewardship: We act and educate in ways that protect land, air and water for futu generations			our delivering quality, science-based			
		improvemen	t		Pillars	of Su	ccess							
Quality Programs: Science-b resources and initiatives that connected to curriculum and modern, hands-on interactions to and empower youth (" <i>NFL Progro</i> <b>Nutrient Stewardship</b> , soil health change, water security, agricultu practices, innovation and techno be at the forefront of resources d NFL Programs will address miscor and promote best practices	s and initiatives that are d to curriculum and offer ds-on interactions to engage r youth (" <i>NFL Programs</i> "). <b>AR</b> wardship, soil health, climate er security, agricultural best novation and technology will front of resources deployed. s will address misconceptions			vernme becifica nd plan l and he & Nort dibility	ips: Continuously lationships with ernment and non- ecifically focusing d plant nutrient and horticultural & Northern Affairs, ibility and ensure Effective communication engage and the Canadian NFL commun and frequency mos				e Outreach: Seek diverse ion opportunities to educate, inform youth, teachers and n public about NFL Programs. nications will scale our reach y for the greatest impact and st effective uptake.			Organizational Excellence: An educational non-profit organization that is unbiased, dynamic, innovative and responsive in order to best meet the needs of industry and society. All operational components of NFL, from the Board of Directors to Committees, Executive Director and Regional Managers, strive to be active, efficient & responsible contributors to NFL Programs.		
Crowing with of programs 9 rose	uroos for	Nourstude				Highli	-	routh	in notions	l and region		Eveell		munications
erowing suite of programs & resc each grade K-12, plus ongoing ec of teachers.				bility &	Id	Growth in national and regional partnerships, recognition and financial support.					Excellence in communications including French and English web- based materials, localized programming and social media and sharing platforms.			
Year-over-year increases in stu	Idents	Growth	n regional	renrese	Measur entation	ing Pr	-		financial a	nd organiza	tional	Δηριμα	l communi	rations audits
Year-over-year increases in students Growth in regional representation, Sustainable financial and organ   reached, teachers engaged, materials downloaded, learning gardens. teacher presentations and organizational partners in each province and territory. Sustainable financial and organ   downloaded, learning gardens. partners in each province and territory. continued transparent audited budget.					ard succession and succes	on,	Annual communications audits, analytics and web-based reporting.							
MEMBERSHIP S	TRUCTU	RE		-						Φ	t	m m		
		Primary Logo Placement	Logo Listed on Website	Logo Listed in Annua Report	Recognition at all events	Recognition in all	printed material	selected material	Voting privileges at AGM	Ability to participate in special committees of the board	Receive a copy of the Annual General Report	Receive NFL Canada E-news	Charitable Tax Receipt	Classroom Activity
CORPORATE PARTNERS ANNUAL CONTRIBUTION														
PLATINUM	\$50,00	00+	ě	ť	ť	Č			Ŭ	ě	Ť	ě	ě	
GOLD			ž	ž	ž	×			ž	ž	ž	ž	ž	
SILVER	\$25,000			×		×			×	×	×	×	×	
BRONZE	\$10,000						×.	, , ,		, v				
\$5000			Ő				Ű	Ő	Ő	Ű	Ű	Ű		
LEARNING GARDEN		500	Ŭ	Ŭ				Ŭ	Ŭ	Ŭ	Ŭ	Ť	Ú	
INDIVIDUAL PARTNERS														
ΤΕΑϹΗΕΙ	SUPPORT	100 TER \$50						Ŭ		Ŭ Ŭ	ů č	ů č	Ŭ Ŭ	ě
FRIEND	WELCON	1ED									Ŭ	ě		

## **2020 FINANCIALS**

#### 2020 REVENUES - \$259,171



#### 2020 EXPENDITURES - \$216,361



## EDUCATOR/ TEACHER MEMBERSHIP

In March, NFL Canada launched a new teacher membership to help expand our reach. We would like to "Thank" the following teachers for becoming members, and bringing NFL Canada materials into their classroom.

Alanna MacPherson Ienna Forslund Ella Lowry Julie Ann Baker Beverly Billard Jeff Baty Kristine Holloway Deepali Medhekar Bonnie Fox-McIntyre Adam Trider Roopa Patel Dakota de Caux Tara Desroches Barbara Janze Rachael Marck Julie Murchison Cindy Smith Kristen Taylor Roland Dionne Stephanie Zondervan Carmen Lachance Corinne Webb

Michelle O'Brian Betty MacDonald Julia Favaro Melissa Pearce Catherine Arthur S haron Moulton Angella MacKay Xiaopeng Gao Briar Fulcher Marie Kroeker Ian Laffin Wendy Nicholson Leah Bryant Grant Fisher-Smith Suba Aiyer Jessica Zhou Roger Hamm Louise Shachtay Andrea Bedard Christina Reid Jackie Preddy Cindy King

Naomi Stockley Samantha Leblanc Elaine Owen Iames Waldner Judith Crocker Carolyn Anbinder Shannon Trevors Heather Reid Catharine Rayner Garth Allan Alison Bodner Andreia Gordon Wendy Bumstead Carly Kentz Megan Gilchrist Theresa Moulds Natasha Yahyahkeekoot Corv Fisher Robert FitzPatrick Kate Renwick Verna Bridges Lori Atkinson

## **THANK YOU TEACHERS**

We want to thank you for continuing to educate and inspire our youth. You have adapted and shuffled countless times over the year and we appreciate your dedication to your students. Your are essential workers and we salute you!

## **2020 IMPACT**

Total Outreach	OVER 195,000
Teachers Impacted	<b>OVER 1,200</b>
Students Impacted	27,517
Resources Mailed	<b>OVER 4,500</b>

#### **WEBSITE STATS**

Users	OVER 5,000
Page Views	OVER 21,900
Downloads	1,298
	(401% Increase over 2019)

### SOCIAL MEDIA

Instagram Followers	220
Instagram Impressions	12,342
Twitter Followers	1,335
Twitter Impressions	172,337
Facebook Impressions	40,988
Facebook Reach	34,036

