MISSION
Promote a holistic education on the importance of plant nutrients to feed the world.

VISION
Empower the next generation of innovators and decision makers with the science literacy on plant nutrients to develop solutions in sustainably feeding the world.
Why We Focus on Education

Education is one of the most important and core pieces of our lives. Learning the basics of reading and math start early, and as students grow and develop into young adults the learning never stops. Although our schools offer a wide variety of topics for learning, here at Nutrients for Life, we feel plant and soil sciences should be at the top of the list. We strive to educate people because it’s important. We will always talk about crop nutrients and how they impact our lives because this information should be known by all. Crop nutrients are responsible for more than half of the food produced. As the world’s population continues to increase (topping 8 billion last year!), the importance of plant nutrients becomes more paramount.

As we continue to grow our resource library, we hope that our resources help students understand the basics of where their food comes from and the complexity of what it takes to grow it. In 2022, NFLF released Root Your Future which takes students on the path to a career in the fertilizer industry. This resource allows students to take a career assessment, giving them some potential careers of interest. As they explore the library of careers, they can learn about salary ranges, degree requirements, professional organizations, and more. Educators can conclude this lesson with a breakout box lesson. Using this “escape room” type lesson allows for a knowledge check, as well as fosters critical thinking skills.

Over the years the NFLF video series has been a popular avenue of bringing our resources to life! This year we created the nitrogen video which joins the popular phosphorus and potassium videos. The newest video in the collection explores the importance of nitrogen to the health of a plant, as well as describes how it is made into a usable form for plants. As one of the more complicated scientific processes, it is a great complementary resource to pair with NFLF’s nitrogen cycle poster and nitrogen cycle challenge game.

Nutrients for Life has a full library of resources about plant and soil science for elementary, middle and high school students. The centerpiece of all our resources is the *Nourishing the Planet in the 21st Century* curricula, which comes geared for elementary, middle or high school students. It is my hope that our resources will always help students learn about plants, how they grow and how very important nutrients are in growing food for us all.

As the Nutrients for Life Foundation will undergo several changes in the coming year by joining forces with the Fluid Fertilizer Foundation and the Foundation for Agronomic Research, one thing that will not change is our investment in education for the future. The Nutrients for Life program will continue just as it has for the past 19 years. We are here to provide science-based information, create resources and educate the next generation. We will be able to expand our mission by adding nutrient research to our scope. In the end, I think this will only bolster our educational resource development and set us up for success as we approach our 20th year anniversary!

HARRIET WEGMEYER
Executive Director
The Nutrients for Life Foundation brings fertilizer, and its importance, into classrooms from coast to coast every year, and has every year since 2004. While we are still recuperating from the changes experienced in the educational world in 2020, we have begun traveling, presenting and connecting face-to-face in order to provide classrooms nationwide with Nutrients for Life curricula, posters, flashcards, digital games, and more.

We are proud of the resources we’ve distributed and the continued growth of our teacher network and the resources we provide year after year. All information developed by our Foundation is science-based and supported by agronomists. Our supplemental educational materials are based on our curriculum which has been reviewed by the Smithsonian Institution, the world’s largest museum complex and research organization.

Since the original *Nourishing the Planet in the 21st Century* middle and high school curricula were created in 2007, Nutrients for Life Foundation has continued to expand its library into relevant, science-based resources reaching K-12 students and beyond. NFLF unveiled two new resources to add to its expanding collection in 2022.

**Root Your Future** takes students on the path to a career in the fertilizer industry. This resource allows students to take a career assessment, giving them some potential careers of interest. As they explore the library of careers, they can learn about salary ranges, degree requirements, professional organizations, and more. This resource also includes an educator guide and parent guide to walk through the processes of scholarships and job applications, resume writing, interview tips, etc. Educators can conclude with a breakout box lesson. Using this “escape room” type lesson allows for a knowledge check, as well as fosters critical thinking skills.

Nutrients for Life completed the set of macro nutrient videos, by releasing the nitrogen video that joins the phosphorus and potassium videos. The newest video in the collection explores the importance of nitrogen to the health of a plant, as well as describes how it is made into a usable form for plants. As one of the more complicated scientific processes, it is a great complementary resource to pair with NFLF’s nitrogen cycle poster and nitrogen cycle challenge game.
Caring For Our Watersheds Ohio

Caring For Our Watersheds is a joint program of the Nutrients For Life Foundation, Hamilton County Conservation District, and Nutrien. This is the third year for the expansion of this program that empowers students to imagine, develop and create solutions in their local watersheds. The program promotes watershed awareness and stewardship, values student ideas, and offers support when turning theoretical ideas into action.

Judges in the environmental field scored student entries, and ten projects were selected to compete in the final competition which was held on April 30th. $10,000 in implementation funding (up to $1,000 per project) was available to all participants, allowing each and every idea to be turned into reality. At the final event, students presented their projects and finalists received cash awards and matching grants for their schools.

More than 132 entries were submitted this year, and these ten projects advanced to the final competition where students competed for $12,000 in awards for themselves and their schools.

Participating Teachers and Schools

Mary Brown
John Marshall School of Engineering

Joe W. Carstensen
Clay High School

Mary Dudley
James N. Gamble Montessori High School

Kelly Dye
West Holmes High School

Melisse Kowalski
Put-in-Bay High School

Tracy Majors
Wyoming High School

Bret Miller
The Summit Country Day School

Tonya Nikats
Loveland High School

Monika Nunez
Ursuline Academy

Mary Beth Rieth
Mount Notre Dame High School

Stephanie Rammacher
Spencer Center for Gifted & Exceptional Students

Kira Rucker
Spencer Center for Gifted & Exceptional Students

William Schnure
Walnut Hills High School

Kat Sickinger
The Summit Country Day School

A joint program of the Nutrients For Life Foundation, Nutrien Ltd., Hamilton County Soil & Water Conservation District.
Toolkit Lessons

Be prepared for a classroom visit or community event by requesting a presentation lesson below. For $20, not only will you receive the lesson, but also the necessary supplies to complete the lesson with a classroom of students.

Exploration of Soil – Not all soil is created equal! Even soil that looks similar can be very different. Soils contain different properties and different nutrients that plants use. This lesson takes a closer look at the differences that can be seen in the soil, including organic and inorganic materials.

From Root to Plant – To understand how nutrients are transferred to a plant, you must first understand the interaction between the plants and the soil. Plants move water and nutrients through the root system either into the root cells from the soil by diffusion or by an energy-requiring process (active transport). This lesson demonstrates the transport of water through the xylem by using celery and food coloring.

Fertilizer 101 – Every plant needs a specific amount of nutrients, similar to a recipe when cooking. Some need more nitrogen, some need more phosphorus, etc. This lesson explores NPK, where nutrients come from and the science behind fertilizer.

If Earth Were an Apple – By the year 2050 the world population is going to top out at nearly 10 billion people, but we aren’t going to produce anymore soil. Looking at an apple as a representation of the Earth, students can see a visual of how much of the Earth’s surface is usable to grow food for the growing population.

Nutrient Movement – Plants remove water and nutrients from the soil through the plant’s root system. Some nutrients move into root cells from the soil by diffusion and others by an energy-requiring process (active transport). This lesson uses a diffusion activity which represents one way nutrients are moved into the plant by using a simple visual with water and food coloring.

Soil Separation – Not all soil is created equal. Soil is made up of different particles that are categorized into three groups – sand, silt, and clay. If we were to look under a microscope, you’d see that those particles are each different sizes. Sand has the largest particles and clay has the smallest particles. This lesson demonstrates the different particles in the soil, as well as organic matter.

Classroom Connections: Who Will Tell Your Story?

Nutrients for Life is here to help industry members tell the story of the importance of fertilizer. Students are our nation’s future employees, consumers, voters and leaders. Through the Foundation’s efforts and resources, fertilizers become part of classroom discussions. With your help, more students can know and understand not only what fertilizer is, but why it’s so important.

How can you help? Utilize our ready-made lessons and visit a classroom, participate in Global Fertilizer Day by hosting a student event or simply provide a classroom with a Fertilizer Fun box!

Fertilizer Fun Boxes Bring Soil Science into the Classroom

Fertilizer Fun Boxes contain multiple hands-on educational soil science activities that focus on the importance of soil and fertilizer. In 2022 the box contents focused on soil health and were sent to 84 classrooms. Educators received Nutrients for Life resources and STEM based lab materials to aide in completion of NPK testing and kits for the students to build their very own fuel cell—powered by soil microbes!
Ten K-12 science and agriculture educators from across the nation gathered June 28-30 in Vernal, Utah, to review Nutrients for Life Resources and learn more about the mining process of fertilizer during NFLF’s biennial 5th Teacher Summit.

Teachers emphasized the value of the current Nutrients for Life resources and expressed their desire for more. From the curricula to the digital resources, teachers discussed each resource in-depth, providing suggestions to current resources and ideas for the future. Teachers then created a “Top 10” list which helps NFLF staff prioritize and gauge educator needs moving forward.

In addition to reviewing resources, teachers toured the Dinosaur National Monument and learned about the process of mining phosphorus and the safety measures onsite at the J.R. Simplot Company Vernal Mine. Thank you to Simplot Company for hosting the group and providing a behind the scenes look at the production of fertilizer. This invaluable experience will be shared with students for years to come!

“I thoroughly enjoyed the teacher summit in Vernal, Utah, this summer. It was so impactful to come together with other educators for collaboration and input on resources. I walked away with different ideas for implementation and professional connections to continue supporting myself and my students throughout the school year. Thank you so much to the Nutrients for Life Foundation for providing this truly wonderful experience!”

— JESSICA SADLER
Did you know the Haber-Bosch process was patented on October 13? We celebrate Global Fertilizer Day on Oct. 13th each year to commemorate the Haber-Bosch patent on the synthesis of ammonia from air in 1908 which laid the foundation of the modern fertilizer industry.

As an industry that helps feed the world, it’s important to tell our story and celebrate our achievements, which is why our Foundation takes part in the celebration by connecting students with various careers within our industry.

For the past few years, Nutrients for Life and The Fertilizer Institute have done a virtual zoom event that has brought industry members into classrooms nationwide. This year NFLF had 38 classrooms, totaling 1,051 students, join virtually. Led by host Karl Barnhart, Chairman of Nutrients for Life’s Advisory Council and chief marketing officer of Brandt in Springfield, Ill., the webinar highlighted the vast variety of career opportunities within the industry. Each segment included an overview of a fertilizer industry career followed by a live Q&A session with each professional.

NFLF also helped facilitate a student event where three schools visited Brandt at their Illinois facility and participated in a live science experiment on the Zoom. Students also played fertilizer-focused, educational games and took turns at Fertilizer Jeopardy, NPK Darts and a break out challenge. Students had to “break out” by breaking into a locked box that could only be accomplished by figuring out clues that also helped teach them about plant and soil science.

Event Speakers

Corey Rosenbusch  
The Fertilizer Institute

Stephen Annells  
Fertilizer Australia

Adam Herges  
Sr. Sustainability Agronomist, Mosaic

Tara Lynn  
Assistant Vice President of Trading – North American Sulfuric Acid, Trammo, Inc.

Tom Torretti  
Director of Bulk Sales and Logistics, Cooper Consolidated

Øystein Botillen  
Stakeholder Relations and Business Development Manager, Yara

Karl Barnhart  
Chief Marketing Officer, Brandt
Formation of Ford West Leadership Academy

The fertilizer industry’s employee training program, the Ford West Leadership Academy, is taking shape. West was a legend in the fertilizer industry, having spent over 35 years promoting, defending, and truly living in the industry. He served as the NFLF and TFI President from 2005 until his retirement in 2013 and passed away in 2021.

The inaugural Ford West Leadership Academy will be held in early 2024. Planning is underway led by the Academy’s Steering Committee.

Ultimately, the Academy creates a stronger industry with a more loyal employee base to ensure the long-term success of the fertilizer industry. Having more loyal employees will reward the industry with active engagement and ownership. Led by a trained group of industry advocates, the Academy will help employees grow their skills, both technical and soft, and provide the tools and training needed for personal and professional growth. In addition, it will enable transfer of industry knowledge from today’s leaders to future leaders and forge a strong industry network and comradery among its participants.

Academy curriculum content will include, but not limited to, the following: leadership, agronomy, fertilizer history, advocating and sales/business development.

STEERING COMMITTEE

Roger Baker, CHS  
Paul Barr, Winfield United  
Marcie Booth, Koch  
Matt Brown, Landus  
Kim Colvin, Quad  
Mindy Dale, Mosaic  
John Fowler, Nutrien  
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"The Ford West Leadership Academy adds a new dimension to NFLF’s work, and one that we are very much looking forward to bringing to fruition. Education and training go hand-in-hand, and we are excited to host the first Ford West Leadership Academy in early 2024."

– Harriet Wegmeyer  
NFLF Executive Director
The Nutrients for Life Foundation hosts two annual golf tournaments to help raise funds for its K-12 educational efforts. The Foundation is grateful to those that participate in these fundraisers and is happy to add some friendly competition amongst industry. The coveted Fertilizer Cup trophy has been passed around since the first golf tournament held in 2005.

**Southwest Fertilizer Conference Golf Tournament**

The Nutrients for Life Foundation Golf Classic at The Southwest Fertilizer Conference in Nashville, Tenn., was hosted at the Gaylord Spring Golf Links in July. Thirty-five teams competed for the top spot on the green and raised more than $30,000 for the education efforts of Nutrients for Life. The golf team representing Southwest Rail Industries – Colin Lippert, Wes Gilmore, Jason Huette and Kevin Flahive – walked off the links to claim the top spot. The two individual contest winners were Joe Ernst with EC Grow for Closest to the Pin and Drake Arnold with Associated Terminals for Longest Drive.

**Annual Golf Tournament**

The 17th Annual Nutrients for Life Foundation Golf Tournament was played in January at the Celebration Golf Course - Disney’s own picturesque town of Celebration. This year’s coveted Fertilizer Cup was presented to the winning team representing Simplot. Players were Troy Tallman, Andy Kaler, Troy Bowers, and Rhett Adams. The second-place team was Mosaic, and the players were Bruce Bovine, David Kirkpatrick, Dusty White and Anthony Brown. Winner of the Longest Drive award was Andy Kaler, and the Closest to the Pin winner was Miles Armstrong. This tournament raised more than $90,000 to further the mission of the Nutrients for Life Foundation.
MEET THE TEAM

Corey Rosenbusch
President

Tiffany Ballow
Program Manager and Louisanna Regional Representative

Melissa Bigge
Kansas Regional Representative

Katie Nainiger
Ohio Regional Representative

Rick Phillips
California, Idaho, Washington Regional Representative

Haley Siergiej
Illinois Regional Representative

Harriet Wegmeyer
Executive Director
Nutrients for Life Foundation

NFLF was established in 2004 to frame the narrative around fertilizers and focus on the critical importance of fertilizers in plant health and food production. Nutrients for Life has operated since that time with its mission focused on school-aged education and the critical role fertilizers play in our lives.

In 2022, Nutrients for Life Foundation reached over 3,664,251 teachers and students with over 201,057 digital and hands-on resources. This successful education program and its classroom resources will be the center of the education pillar. Continuing to connect teachers and students and teach them about the critical role fertilizers play in our lives is the central focus. TFI’s strategic initiative to promote the industry to the general public also creates an opportunity to leverage NFLF’s assets to target messages towards communities in environmentally impacted areas.

Ford West Leadership Academy

Continuing to feed the world requires top talent and employee dedication. The Ford West Leadership Academy will invest in future leaders to ensure the long-term success of the fertilizer industry. The Academy will help industry employees grow their skills, both technical and soft, ensure the transfer of industry knowledge from today’s leaders to future leaders, help develop the tools necessary for career success, as well as increase networking and camaraderie of its participants. By creating a more loyal employee base, the Academy will strengthen the industry. The first Academy will be offered in early 2024.

Foundation for Agronomic Research, Fluid Fertilizer Foundation

The Foundation for Agronomic Research (FAR) is a research-based 501(c)(3) foundation. The activities of FAR will be rolled into the new fertilizer industry foundation, and FAR will be dissolved so there will be just one 501(c)(3). FAR’s research strategy is centered around six core elements:

- 4R Field-Based Applied Research utilizing University of Kentucky Model
- Identify & Solve Industry Research Needs in Partnership with Research Institutions
- Disseminate Research
- Establish Scientific Advisory Network
- Enhance and Promote 4R Industry Resources and Tools
- Private Industry Research

The Fluid Fertilizer Foundation is a separate research foundation whose research focuses on fluid fertilizers, although there are many common research objectives of the industry. Those objectives include:

- Development of applied research, focused on solving industry challenges;
- Dissemination of current and past research to the industry, including a single event focused on convening industry and academia; and
- Creation of a widely accessible database or catalog of past research projects.

“Moving education, training and research under one umbrella just makes sense. We will be able to quickly take scientific research from agronomists and turn it into real-life resources in the classroom.”

– Harriet Wegmeyer
NFLF Executive Director
A Time for Optimism

The Nutrients for Life Foundation (NFLF) had a year of purpose and performance in 2022. Our educational efforts in classrooms across the country returned to pre-pandemic level activity. We released new resources that will further help students learn about the valuable role fertilizers play in their lives, and industry excitement built as the Ford West Leadership Academy began to take shape. However, the most impactful step forward made by the Foundation this year is the decision by the Board to join forces with two other fertilizer-related foundations to serve the fertilizer industry at a higher capacity.

NFLF, the Fluid Fertilizer Foundation (FFF), and the Foundation for Agronomic Research (FAR) will join forces on July 1, 2023, to become a new foundation to better serve the needs of the fertilizer industry in the areas of education, training and research.

NFLF was established in 2004 to frame the narrative around fertilizers and focus on the critical importance of fertilizers in plant health, food production and our lives. Nutrients for Life has operated since that time with its mission focused on school-aged students and those that teach them. I am proud to say that Nutrien’s predecessors PotashCorp and Agrium were both founding members.

Founded in 1982, FFF provides research and educational funding for continued improvement in the application and efficiency of fluid fertilizers in all programs. Again, PotashCorp and Agrium both supported this worthwhile organization.

FAR is a non-profit research and education foundation created to improve the research, education, economic vigor and sustainability of agriculture. The 4R Research Fund was established in 2013 to address knowledge gaps in nutrient management. Since then, the industry has invested $8.4 million while leveraging $8.8 million in other funding to support 4R research. Once again, Nutrien and its predecessor organizations were heavily involved in FAR activities.

As a strong supporter of all three foundations, I am incredibly optimistic for the future. Bringing the missions of these organizations together allows us to serve the fertilizer industry in a more succinct and impactful way, as well as being more efficient for fertilizer companies. I envision the research being conducted will quickly find its way into classrooms, as well as the industry’s new training program.

Change always comes with challenges, and I feel we are ready to tackle those challenges. This change also comes with tremendous optimism and excitement for the future. We will be rolling out a new name and identity that unifies these three foundations by July 1, 2023. I hope you will join me in cheering on this new path forward by being involved and supporting this expanded work that will benefit us all.

Chris Reynolds
EVP & President, Potash, Nutrien
Chairman, Nutrients for Life Foundation

FROM OUR CHAIRMAN

FINANCIAL SUMMARY
JUNE 30, 2022

$872,438
2022 Total Revenue

$943,127
Total Expenses

Outreach $98,153
Resource Creation and Promotion $161,974
Regional Programming $321,234
Fundraising $285,310
General & Administration $76,456
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