NUTRIENTS FOR LIFE

SPRING
2010

{KNOW YOUR}
farmer
KNOW YOUR FOOD

The MAN WHO FED THE WORLD

SPRINGTIME GARDENING

{ from the board }

Grassroots Effort

As a founding member of the Nutrients for Life (NFL) Foundation, I have witnessed the tremendous progress made by this foundation to engage and communicate with stakeholders. Through these efforts we have learned a great deal about stakeholders' concerns and perceptions of nutrients and their impact on the environment, society and the economy. Key accomplishments such as the *Nourishing the Planet in the 21st Century* curriculum have provided science-based information to middle and high school students so they have the knowledge necessary to make informed decisions on environmental, social and economic issues. The Foundation has also taken an important step forward by developing programs that engage and support grassroots efforts.

Grassroots programs help us build partnerships with local stakeholders to improve communication. In 2009, NFLF expanded this effort by incorporating regional representatives to heighten awareness of the Foundation and communicate more effectively with local stakeholders. The relationships developed in 2009 have opened the door for a new, more meaningful dialogue with stakeholders that would not have occurred without this local contact. It has increased program utilization and has provided valuable input for improving our efforts. Agrium supported the initiative with the creation of the first position in June in Florida and a second position has since been created in Idaho. I would like to thank Joan Kyle regional representative in Florida, and Rick Phillips, regional representative in Idaho, for their dedication and work.

At Agrium, we are supporting grassroots efforts by providing employees with Nutrients for Life materials to educate themselves, their families and people in their communities. We encourage employees to volunteer and support stakeholders in their quest to learn about our industry, in a manner that encourages inquiry and open discussion. These are not always comfortable discussions but they are often the most valuable.

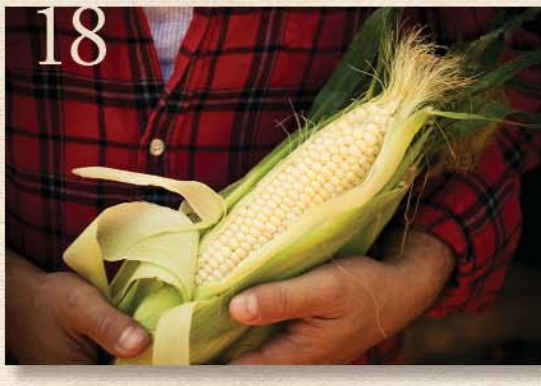
As I look forward, we must not only expand our communication programs in the United States, but we must support grassroots efforts in developing nations. Through these efforts we can support the United Nations' goal of eradicating extreme hunger. While this is not an easy task, our industry can work with aid agencies to help impoverished farmers access and utilize our products to grow crops to obtain food and capacity building funds. Many fertilizer companies are supporting these efforts and through the NFL Foundation we will continue to empower grassroots efforts at home and abroad.

Sincerely yours,

Mike Wilson, *Agrium*

{contents}

SPRING
2010



in every issue

features

{from the editor}

Linking Gardening and Soil Nutrition

For farmers and gardeners alike, the winter months are spent ordering seeds, planning planting locations and writing out timelines. When spring arrives, it is a joyous occasion. For me, spring means a delicious strawberry season is right around the corner on my farm, and the seeds are ready to sow in the garden.

As an educator, this may be the time of the year when your classroom moves outdoors. Last year, school gardens were popular and this year their popularity is expected to increase even more so. Planting a garden is a great education tool for a variety of reasons. Children enjoy "doing" – working the soil and caring for the plants certainly involves a lot of "doing." Also, the simple garden project has an endless number of lessons associated with it. For example, lessons could coordinate with a cooking class, nutrition class, and of course, science classes. At Nutrients for Life, we will be unveiling a new elementary school plant and soil science curriculum – a complement to our popular *Nourishing the Planet in the 21st Century* piece this year. With a focus on healthy soil, the upcoming garden lesson will explore soil testing, soil properties and the basics of gardening. It will also answer the question of how fertilizer, whatever the source, fits in your garden. Getting your soil right in your garden is a critical step to be taken well before you are ready to dig in and plant.

Before you'll know what crop nutrients, or fertilizers, should be added to your soil, you'll need to take a soil test. Using either a soil probe (which lets you get deep into the soil), or a trowel or shovel, take a sampling of soil from several locations in your proposed plot. Soil tests can be done with your own purchased equipment or sent away to your state's soil lab usually located at your land grant university. Once you add the proper nutrients to the soil, you are ready to begin. Preparing soil is a great opportunity to talk about science basics, such as the element chart and biology, before the planting and nurturing begins.

If you are considering putting a garden in at your school (yard or container), do your research as garden grants and lesson plans are varied and widely available.

In addition to the acres of pumpkins, strawberries, raspberries and blackberries I grow on my farm, I am putting in a small garden this year – peas, beans, beets, cucumbers, melons, peppers and lettuce – just for me and my family to enjoy. I spent my summers in my mother's one-acre garden from the time I can remember. I could eat anything fresh at any time I wanted…and we always had fresh vegetables for meals. Not one of my teachers in school ever brought the gardening lesson into the classroom, but I think that's because more parents had home gardens. Teachers today can make such an impact showing our youth how to grow food for themselves, and show them the different options they have available when growing their garden.

Harriet Wegmeyer Harriet E. Wegmeyer
Executive Director, Nutrients for Life Foundation

Dig It! hosted its last visitors on Jan. 10, after 18 months at the Smithsonian Institution's National Museum of Natural History.

A Tribute to **Soils**

From July 2008 through January 2010, visitors to the Smithsonian Institution's Museum of Natural History journeyed into the skin of the Earth and explored the amazing world of soils in *Dig It! The Secrets of Soil*.

The Nutrients for Life Foundation was proud to be the lead sponsor of this educational and impressive exhibition. Completely familiar yet largely unknown, soils help sustain virtually every form of life on Earth. *Dig It!* transported visitors to the world of fungi, bacteria, worms and countless other organisms. Visitors discovered the amazing connections between soils and everyday life and had the chance to think about this hidden world in a whole new way.

"This was an impressive teaching tool for any person who stepped foot in the Smithsonian's Natural History Museum," said Nutrients for Life Foundation Executive Director Harriet Wegmeyer. "Teachers, parents and friends – over the course of 18 months – learned about one of our Earth's most under-appreciated resources, soil."

{ Visit **www.mnh.si.edu** to take the virtual tour of the exhibition. }

{ teachers }

NFLF Attends 2009 NSTA Area Conference

The Nutrients for Life Foundation (NFLF) exhibit booth was a hot spot during the 2009 National Science Teachers Association (NSTA) Area Conference and Trade Show on Science Education in Ft. Lauderdale, Fla., in November 2009. Over 280 science teacher attendees visited the booth – which was shared with Florida Agriculture in the Classroom Inc. – and took the NFLF curriculum *Nourishing the Planet in the 21st Century* back to their classrooms.

The theme of this conference was "Diving into the Next Generation of Science." At Nutrients for Life, we share this passion as we provide educators with the tools to teach the importance of fertilizer nutrients in food production, and subsequently our own health and well-being. "We were pleased to collaborate with Florida Agriculture in the Classroom for this conference and trade show," said NFLF Florida Regional Representative Joan Kyle. "The shared booth space allowed for a dual promotion of our complementary (and complimentary!) curricula, outreach, and education materials and resources."

Together, NFLF's Kyle and FAITC Executive Director Lisa Gaskalla emphasized the importance of the science of agriculture and its role in their science curriculum and teaching program to the teachers who came to learn more about our message. Nutrients for Life showcased its resources and materials available for all levels of instruction and clearly peaked the scientific curiosity and interest of the visiting science teachers.

The NFLF middle and high school curricula have been reviewed by the Smithsonian Institution and demonstrate Nutrients for Life's commitment to agricultural science and educators in the promotion of the critical role that agriculture plays in everyday lives.

"The NSTA Area Conference was well attended by the science teachers of the Southeast, and proved to be a great venue to launch and network our NFLF program in Florida," said Nutrients for Life Foundation Executive Director Harriet Wegmeyer. "We will continue to work diligently to put our resources and materials in the hands of a sustainable network of educators to reach future leaders and citizens with our message, 'Fertilizer is Life's Main Ingredient.'"

Pictured left: Nutrients for Life attended the Teachers Association Area Conference in Ft. Lauderdale, Fla., Nov. 12-14.

Come See Us!

2010 NSTA National Conference

PHILADELPHIA, PA. MARCH 18-21

The Nutrients for Life Foundation will participate in the National Science Teachers Association (NSTA) National Conference on Science Education, held March 18-21 in Philadelphia. The exhibit booth **(Booth #1905)** will offer information to teachers to improve student understanding of the role plant nutrients have on the environment, crops, food and people's health. Extensive student and teacher materials, including complimentary copies of the plant and soil science curriculum, *Nourishing the Planet in the 21st Century,* will be distributed. Nutrients for Life is developing an elementary school version of this popular middle and high school curricula, and will have a sneak preview at the booth. Be sure to come see us!

Connecting SCIENCE PAST with SCIENCE FUTURE
NSTA National Conference on Science Education
Philadelphia, Pennsylvania
March 18–21, 2010

TEACHER SPOTLIGHT

Q & A with Cindy Griffin

College and Degree:
AA from University of Florida, BA in Secondary English Education, Florida Atlantic University, Certification in Elementary Education, Florida Atlantic University

Years in Teaching: 23

Subject(s) Currently Teaching:
Middle and High School Agriscience

What do you enjoy most about teaching?
Having students and teachers discover the plants, products and people that produce agriculture in Florida.

What is your involvement with the Nutrients for Life Foundation?
I am a facilitator for Nutrients for Life. Originally, I became acquainted with Nutrients for Life Foundation and received their middle and high school curricula at the annual Florida Agriculture in the Classroom Teachers Workshop in June of 2009.

Have you used the *Nourishing the Planet in the 21st Century* middle and high school curricula and if so, how?
I taught a lesson from the curriculum to two middle school classes where I implemented Lesson #2, "Properties of Soils." Students interacted to examine the types of soil, components and properties.

I have shared these ideas and curriculum with other teachers in my school district. I am currently integrating several pieces of this curriculum into my agriscience lessons.

Have you presented the *Nourishing the Planet in the 21st Century* materials to others? Please explain.
I represented Nutrients for Life at the Annual Miami-Dade County Science and Mathematics Teachers' Symposium, a teacher training professional development workday. I presented the Nutrients for Life materials, one lesson from the NFL curriculum, and agricultural messages in a break-out session workshop.

What would you like to share with other teachers about the Nutrients for Life curriculum materials?
The curriculum encourages students to look at agriculture issues in an analytical way and ultimately, assist them in making informed decisions.

What do you try to teach your students about fertilizer?
That plants need nutrients to grow like humans need vitamins. Most students do not realize that when crops are harvested, the nutrients go with the crop; therefore, plant nutrients need to be replenished after each harvest.

What is the most rewarding experience that you have had teaching students about agriculture:
I was working in a garden at an elementary school during aftercare and a student was sent to me who had just moved to our area. He was not adjusting well, much bigger than the other second graders and very country, not a city student at all. He saw me in the dirt and moaned with delight. He asked me with tears in his eyes if he could touch the topsoil of

the garden, he had been so homesick for his grandmother's garden in South Carolina and he wanted to feel dirt between his fingers again.

Any awards/recognition that you would like to share:
National Wildlife Federation Habitat Steward, Certificate of Leadership from Florida Agriscience Education Leadership Program, Florida Nursery, Growers & Landscape Association certified Horticulture Professional, Florida Farm Bureau Women's Leadership Committee State Director, Florida Ag in the Classroom Volunteer Advisory Committee member and facilitator

Please share something interesting about yourself with our readers.
I enjoy scrapbooking and am an Atlanta Braves fan.

An Interview with Cynthia Griffin, Agriscience Resource Teacher, Broward County Public Schools in Fort Lauderdale, Florida

Agriculture and Education Veteran **Rick Phillips** Joins Nutrients for Life Effort in Idaho

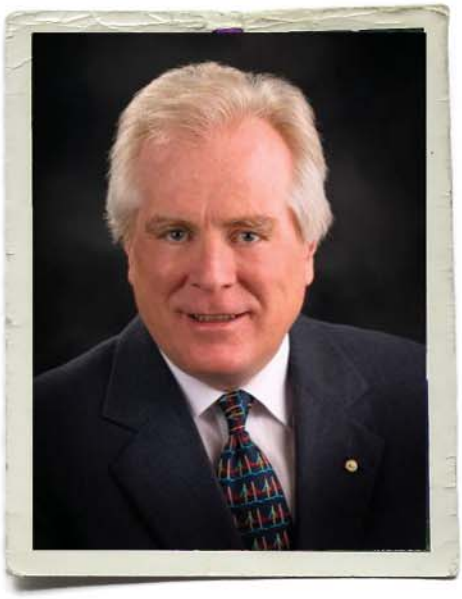
Educators in Idaho, as well as California, Oregon Washington and Wyoming, have a new resource in Rick Phillips. Phillips, a lifelong agribusiness advocate, began his new position in mid-November 2009. As the Nutrients for Life Foundation Regional Representative in Idaho, Phillips is the point person for educational materials, grassroots activities and public awareness information on the Q's and A's surrounding plant nutrients.

"I am excited about the opportunity and the accountability to focus on this partnership," said Phillips. "Our focus on agriculture education is an important one because it shows future generations the importance of farming. It also boosts math and science education by linking those subjects to the fascinating world of agriculture, including highlighting how essential plants and soils are to life on Earth."

Phillips' primary emphasis is working with educators in the school system in promotion of the Foundation's plant and soil science curriculum, *Nourishing the Planet in the 21st Century*; working within the agribusiness community in sharing the Foundation's core messages; and enhancing community relations.

Phillips is the second regional representative to work on behalf of the Nutrients for Life Foundation. Joan Kyle began her regional representative position in Florida in June of 2009.

"We have witnessed first-hand the impact of an on-the-ground teacher and community resource and are excited to have Rick on our team," said Nutrients for Life Executive Director Harriet Wegmeyer. "Rick's understanding of the education sector and vast agricultural knowledge makes him a key resource among teachers and communities."



Phillips is an employee of the J.R. Simplot Company, an agribusiness company and fertilizer producer headquartered in Boise, Idaho. Almost half of Phillips' time will be devoted to promoting the Foundation's mission to provide science-based information to help educate people about the benefits of crop nutrients.

The company's dedication of resources to the foundation reflects Simplot's commitment to education and the promotion of agriculture. Not only does the partnership strengthen agriculture education, but it also highlights the bond between the company and Nutrients for Life, which counts President and CEO Bill Whitacre as a member of its board.

Phillips has many years experience in education outreach. In 1985, he helped establish the Idaho Ag in the Classroom Association. In 1991, he organized the Simplot Education Council and in 1997, was appointed by Idaho's governor to chair the Idaho School to Work Initiative. From 1998 to 2004, he served as a Commissioner on the Northwest Commission of Schools and Colleges, the accreditation agency for schools in an eight-state region. He has also traveled to schools in Jordan and Russia to help them meet U.S. accreditation standards.

Rick is based in Pocatello, Idaho, and be reached via e-mail at **rick.phillips@simplot.com** or by phone at (208) 235-5685.

Nutrients for the Mind

Nutrients for Life Foundation Canada spent a busy year building interest in our educational materials, fostering new partnerships to help us spread our messages, and developing strategies for maximizing the impact of our activities.

Our public education efforts recognize the need to connect with youth and our flagship offering is our *Nourishing the Planet in the 21st Century* educational materials. This year we undertook the task of tailoring these materials to meet the provincial standards for Ontario, Alberta, Saskatchewan and Manitoba, and we are thrilled that the supplements are now available to teachers in those provinces. To date, the Foundation has participated in six science teacher conferences across Canada, through which more than 500 copies of the educational materials were distributed. Translation and production of French versions for three more provinces; Ontario, Quebec and Manitoba, will also be completed in the months to come.

The environment was an important theme for Nutrients for Life this year. It has become apparent that Canadians increasingly want action to protect the environment, and we are working to promote environmental stewardship and to show society how responsible nutrient use is a critical component of meeting the increasing global demand for food and for environmental protection. Responsible nutrient management, by following science-based best management practices (BMPs), makes sense in both rural and urban environments. The principles of 4R nutrient stewardship, which promotes the use of the right fertilizer source applied at the right rate, right time and right place, will be a foundation of our future programs. Through our partnership with Communities in Bloom, a new priority is broadening these messages to urban audiences. Our plans for the coming year provide many opportunities to demonstrate how nutrient stewardship works in urban settings to preserve green spaces and address environmental issues.

This year we continued to grow and evolve as an organization to more effectively meet our goals. We successfully launched a program through which donors are able to sponsor an additional staff to work for the Canadian Foundation. Our first donor-sponsored employee, Tanya Black, who works alongside other in-kind staffing from Canadian Fertilizer Institute, has been an outstanding addition to the team and has made great strides in promoting Nutrients for Life. Going forward, the internships will put additional resources on the ground to help engage both educators and the public in our programs. We plan to develop a toolkit to help our staff, supporters, partners and donors become more engaged in the Foundation's activities.

In March and December 2009, the Foundation's Board of Directors and advisory group participated in strategy sessions. The group identified new approaches for engaging educators and youth, such as leveraging social media, developing more interactive content and the addition of an elementary school component. Through these strategy sessions, we've identified the benefits of involving key stakeholders in plant nutrients and created a diverse Board of Directors that includes educators, farmers, scientists and representatives from the fertilizer industry. This diversification led to the election of Terry Baker, a Saskatchewan farmer, as Board Chair in December 2009.

Here at Nutrients for Life Canada, there is a void we strive to fill. The public needs to be provided with educational materials to learn how plant nutrients are essential to maintain the health of our soils and in turn ensure the sustainable production of nutritious food and how, through science, farmers can be stewards of the environment and protect the natural resources essential to food production – air, soil and water.

Contributed by Nutrients for Life Canada, Ottawa, Canada **www.nutrientsforlife.ca**

NUTRIENTS FOR LIFE NUTRIMENTS POUR LA VIE

Make-A-Difference Thumbdrive 1

The thumbdrive contains a few select, ready-made materials that you can use to educate your local community about the importance of fertilizer, such as ready-made speeches and PowerPoints, media tools including PSAs, and e-mails and letters on how to get the Nutrients for Life Foundation plant and soil science curriculum into local schools.

Materials Available

Seed Bookmarks 2

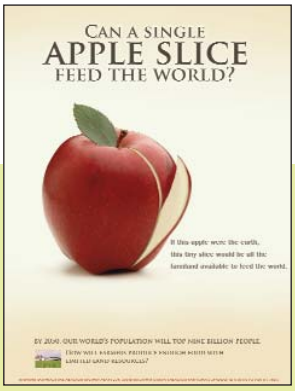
Deliver these cute and creative seed bookmarks to the classroom. The bookmark coordinates with the *Nourishing the Planet in the 21st Century* curriculum. Students can remove the "plant container", plant in the soil and watch the flowers grow.

There's What in My Food? 3

A fun and valuable resource for teenagers and adults, "There's What in My Food?" offers insight to improve understanding about modern production agriculture and why it is so important in assuring plentiful, affordable and safe food supplies.

Fun With the Plant Nutrient Team 4

The perfect piece to help children (grades 3-5) understand the basics of crop nutrition.



Apple Poster 5

Can a single apple slice feed the world? This is a great resource poster for teachers to use as they address the challenges of feeding a growing population.

>> For more information on items featured here, please contact the Nutrients for Life Foundation, at **info@nutrientsforlife.org**.

10

Recipe Cards
A series of three recipe cards, recipes include pumpkin soup, chocolate chip cookies and baked spaghetti cakes.

12

Take A Closer Look Series
Fertilizer for Better Bread: Find out how the protein content in wheat correlates to the nitrogen fertilizer applied to the field.

Nutrition and Your Diet: Learn how fertilizer nutrients ensure the food eaten meets micronutrient requirements.

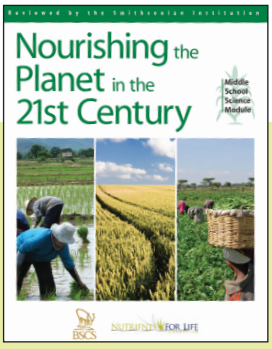
Fertilizer in Your Salt Shaker: Whatever the intended use, as a food supplement or a fertilizer nutrient, the potassium chloride consumed is exactly the same.

Nutrients in the Soil: Take a look at the role fertile soils play in producing high quality food.

11

Fertile Minds Kit

Videos, CDs, postcards and brochures all packaged for easy handling. If you're in the fertilizer industry or you want to find out more about fertilizer, this is a one-stop resource for those of all ages.



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Nourishing the Planet in the 21st Century Curriculum
Nourishing the Planet in the 21st Century is a science-based curriculum supplement for middle and high school students. The supplement offers six lesson plans designed to teach students about feeding the growing world.

7

5 Key Message Cards
The wallet-sized 5 Key Message Card concisely states five of the top truths about fertilizers.

8

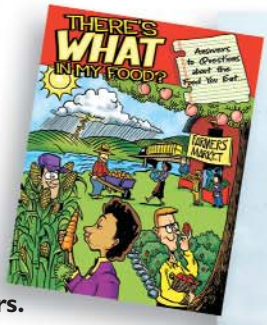
Fertilizer Is Life's Main Ingredient Posters
A series of three educational campaign posters.

9

Ruler
Six-inch ruler that publicizes the *Nourishing the Planet in the 21st Century* curriculum.

{students}

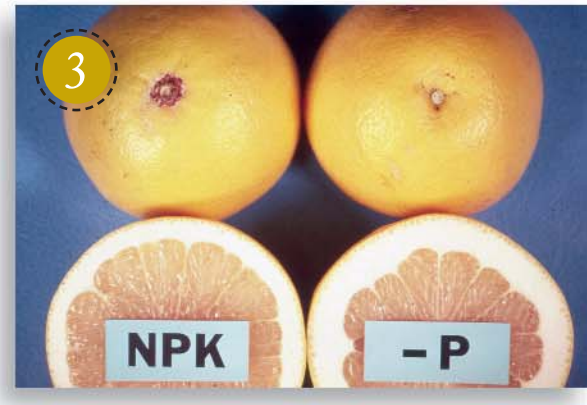
What's **Missing** in Each Photo?



What happens if crops and various food plants don't get the correct balance of needed nutrients at the right time? Various negative effects can include poor growth, yield losses, inferior quality harvests, and diminished storage and shelf life. Components of crop products that may suffer include contents of protein, carbohydrates, vitamins and other nutritive factors.

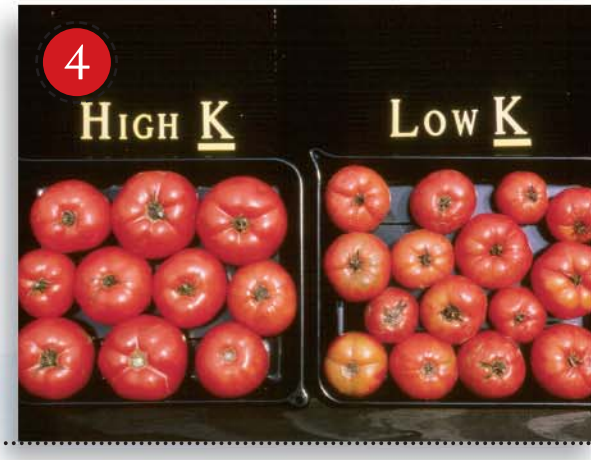
1 **What nutrient is deficient in the corn and cornstalk at right?** Potassium is a key nutrient for corn and other crops where a strong root system is important. The consequence of low potassium fertility is shown at right above.

2 **What nutrient is deficient in the ear of corn above?** The ear of corn at left is deficient in phosphorus, which is essential during early growth. Deficiency interferes with pollination, grain fill and maturity.



3 **What nutrient is deficient in the grapefruit?** The lack of phosphorus resulted in a thicker rind, as shown at right. Poor phosphorus nutrition can cause pale color and spongy citrus fruit.

4 **What nutrient is deficient in the tomatoes?** Tomatoes at right suffered from low potassium fertility. In some vegetables, potassium fertilization can increase the vitamin C content.



This information, and much more, can be found in the publication *There's What in My Food?* For your own copy, contact the Nutrients for Life Foundation at (800)962-9065.

SPRINGTIME GARDENING

ENVIRONMENTAL HORTICULTURAL AGENT, CHARLES FEDUNAK

Spring can be a fabulous time to enjoy the outdoors, especially after a hard winter that has kept you indoors way too long. With spring, which can vary from early February to May depending on where you live, comes new growth and a fresh beginning for another year. For healthy growth, your garden will need healthy soil.

THIS IS AN EXCELLENT TIME TO INTRODUCE CHILDREN TO GARDENING. THE SME

Getting the Soil Right

Soil is often viewed as the boring part of gardening. While garden soil will never be glamorous or even as interesting as choosing plants, there is a whole world under our bounty that literally and figuratively is the foundation for our gardens. Year after year, new gardeners are encouraged to put money and effort into improving their soil before they even consider planting, but few appreciate the wisdom in what they are hearing until they watch their new plants struggling for survival by way of nutrients and water.

The first glimpse of spring is the perfect opportunity to soil test. Once the ground has thawed and you are able to dig up some dirt, find out what nutrients your soil has in holding for your soon-to-be garden. You can purchase soil test kits from your home-garden center or find your local county extension office for a free kit (when the soil sample is sent, there is a charge for processing). For those that added amendments in the fall, the winter months provided ample time to work the nutrients into the soil.

Soil additives include a variety of fertilizers, such as compost, manure and commercial fertilizers. In the spring, it is encouraged to use soil additives that are fairly broken down. Many materials are great mulches, but are not recommended to be incorporated into the soil until they have composted down more. During this time the materials can actually compete with plants for needed nutrients and water. Spring temperatures make the hard work of mixing these materials into the soil a little more bearable. The addition of "food" materials is especially beneficial in the vegetable garden. Here the materials will assist in holding nutrients and water for the tender vegetable plants. In a new garden you may need to add as much as four to six inches of composted materials that will be worked into the soil prior to planting. In established garden areas three to four inches of composted material may be adequate.

This is an excellent time to introduce children to gardening. The smell and feel of the freshly prepared soil is something they will remember for years. Who knows, this may even inspire a new area of interest for many. Also many of the spring plants grow and produce quickly, which can provide immediate rewards for their



LL AND FEEL OF THE FRESHLY PREPARED SOIL IS SOMETHING THEY WILL REMEMBER FOR YEARS

endeavors. This is especially true with plants such as radishes that can be harvested as early as 20-30 days after planting. These may be used along with longer growing plants such as tomatoes and peppers that can take from 80-110 days to produce. The length of time to harvest may also be a factor when you are deciding what to plant. For school projects, time the planting so you can enjoy your work. Also, remember that the faster you are able to harvest your vegetables, the less likely a pest will discover your work.

Debugging

Scouting your plants for early detection of insects or damage will provide you with the best control results. It is also important to obtain proper identification of insects before applying any chemical. Many times a beneficial or predator insect, which can be larger and more visible, may be present and takes the blame for the damage. When applying chemicals, do so during the early evening to reduce harm to beneficial insects, which include your pollinators, such as bees and butterflies.

Fun and Practical Ideas for the Garden

Flowering Plants: Placing flowering plants in or near the garden to attract pollinating insects is very helpful. These plants not only attract beneficial insects but add a little color and beauty to the gardens. You may want to even consider some edible flowers such as nasturtiums. We forget sometimes that tomatoes were first used as an ornamental plant in the landscape.

Going Vertical: Be creative, especially where space is limited, with vine crops, such as beans, cucumbers and even melons. Many of these plants can be grown vertically on a trellis to not only save space but provide interest and ease of care and harvesting. Growing plants and vegetables on a trellis is especially fun with children. Creating a tunnel of vines where fruit hang overhead on a teepee structure with beans and morning glories is fun as well as educational. Make sure you build any structure strong enough to handle the added weight of the vine, fruit and anchored to withstand winds.

Charles Fedunak is an Environmental Horticultural Agent for the University of Florida for Lake County, Florida.

"The successful gardener fertilizes adequately, but not excessively; irrigates thoroughly and not too frequently; and promotes good soil structure by mixing in organic matter and by minimum tillage of the soil when the moisture content is medium."

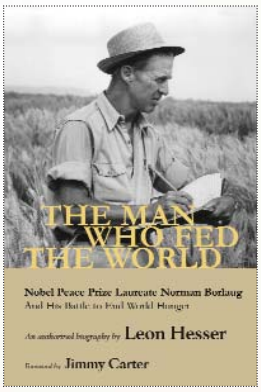
AccurateAg Books GRADES 9-12 FEEDING THE WORLD

The American Farm Bureau Foundation for Agriculture is a 501(c) (3) affiliate of the American Farm Bureau Federation established in 1967 to initiate and finance agricultural research and education.

CURRICULUM SPOTLIGHT

The Man Who Fed the World

A new curriculum addressing social, political and environmental issues in relation to sustainable agricultural development is hot off the press. *The Man Who Fed the World,* geared to high school science and agriculture teachers, brings the life's work of Norman Borlaug–one of the 100 most influential individuals of the 20th century–to today's youth.



The book, *The Man Who Fed the World,* is an authorized biography of Nobel Laureate Norman Borlaug and describes his lifelong quest to "feed the world" through his contributions as a scientist. To help teachers use the book in their classroom, the American Farm Bureau Foundation for Agriculture (AFBFA) also published a teacher's guide, which provides rigorous and relevant instructional plans to address standards in Social Studies, Science and Language Arts. Visit www.agfoundation.org to order the curriculum.

"The purpose of the curriculum is to help high school students examine the element of sustainable international development efforts, specifically with respect to the role agriculture plays in spurring economic transformation and growth in developing countries," said AFBFA Director of Education Curtis Miller. "We want to encourage a whole new generation of students to ask themselves questions like, 'How will we cultivate a sustainable future for Earth's growing population?' or 'What role does agriculture play in ensuring food security?'"

For those that have used the Nutrients for Life *Nourishing the Planet in the 21st Century,* this new curriculum from AFBFA is a perfect complement. The curriculum was test piloted in ten high schools all over the United States and 100 percent of those participating schools said they would use the curriculum again in their classroom and that they would recommend the book and lessons to another teacher.

Are you interested in winning a set of books and accompanying curriculum for use in your classroom? The Nutrients for Life Foundation is offering three sets (25 books) of book grants to the winning teachers who answer the question of *why they would want to teach their class about Dr. Borlaug's work and how the students would benefit.* Essays should be no longer than 1,200 words and submitted to Nutrients for Life, 820 First Street, N.E., Suite 430, Washington, D.C. 20002. Essays must be received by June 11, 2010.


Know Y
Know Y

Know Your Farmer

Know Your Food

Where does your food come from? Finding the answer is a major objective of the U.S. Department of Agriculture's (USDA) "Know Your Farmer, Know Your Food" initiative. This USDA-wide effort is part of a national conversation about the importance of understanding where your food comes from and how it gets to your plate. The many answers to this question seem endless: grocery store, restaurant, garden and the list goes on. As USDA has challenged people to think about food's sources, it has also raised curiosity about what it takes to grow healthy food. Whether your preferred growing method is conventional, sustainable or organic, one thing is for certain, crop nutrients–fertilizers–are essential for healthy plant life.

Agriculture Deputy Secretary Kathleen Merrigan is charged with the "Know Your Farmer, Know Your Food" initiative to continue the national conversation about developing local and regional food systems and finding ways to support small and mid-sized farms.

"No matter the size of the farming operation, healthy foods require nutrients, or fertilizers," said Harriet Wegmeyer, executive director of the Nutrients for Life Foundation. "Nitrogen, phosphorus and potash offered from a wide variety of sources, are essential for plants to produce healthy and delicious food. USDA's initiative is a great time to reflect not only on healthy food, but also about how it's grown."

Know Your Farmer

The "Know Your Farmer, Know Your Food" initiative includes such major agricultural topics as supporting local farmers and community food groups; strengthening rural communities; enhancing direct marketing and farmers' promotion programs; promoting healthy eating; protecting natural resources; and helping schools connect with locally grown foods. USDA also began a pilot program aimed at improving the health and wellness of federal employees by serving local, nutritious food at USDA cafeterias.

The "Know Your Farmer, Know Your Food" initiative emphasizes the need for a fundamental and critical reconnection between producers and consumers. The effort builds on the 2008 Farm Bill, which provides for increases and flexibility for USDA programs in an effort to promote local foods. Consumer demand for locally grown food in the United States is expected to rise from an estimated $4 billion in 2002 to as much as $7 billion by 2012.

"Americans are more interested in food and agriculture than at any other time since most families left the farm," said Deputy Agriculture Secretary Kathleen Merrigan in a statement announcing the initiative.

Know Your Food

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parting shot

The Smithsonian bids farewell to Dig It! The Secrets of Soil exhibit.