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Heifer Study Tours immerse you in the countries, cultures and lives of Heifer project participants. For one to two weeks you'll not only witness the root causes of hunger, but you'll see the solutions in action. As you are inspired by farmers working to better their lives, you will realize that simply being with them has already improved your own.

Heifer Study Tours. Travel to a better world.

Visit www.heifer.org/studytours or see the calendar on page 51 in this issue for details.



Moving Forward

Dear Friends,

LAST YEAR, Heifer International celebrated its 65th anniversary. Since those first days when "Seagoing Cowboys" herded livestock onto ships and floated them to needy people overseas, Heifer has grown in reach and breadth. We work with people in more countries, and we provide more and better training. We're building on what we've always done, only today we do it better.

So, I was delighted to see the results of the Harris Interactive Poll that put Heifer among the nation's top 10 most trusted nonprofits. We're pleased that people recognize Heifer's track record and ongoing commitment to our mission. Your trust and support make our work possible.

In this issue of World Ark, you can read about a Heifer project in Thailand, where poverty has a stronghold in many rural areas. I had the chance to visit Thailand in 2004, and I'll never forget my nerve-racking ride on the back of an enormous but ultimately trustworthy water buffalo. I'll also never forget a day trip to one community on the Thailand-Laos border where income from new Heifer animals was sending children to school for the first time. Education was the first priority for the families I met, and they were so pleased to finally be able to afford school fees. This entire community was nurturing its children, and in that way they were nurturing the future.

Also in this issue is a story about education travel, including Heifer's Study Tours. These visits to Heifer projects offer a life-changing opportunity to meet project participants and witness their amazing accomplishments. I've been on many Study Tours myself and highly recommend them.

My first Heifer Study Tour took me to Zimbabwe and South Africa. This would be my first time in Africa and I wasn't sure exactly what I would learn, but I was anxious to see how the Heifer philosophy I believed in so strongly worked on the ground. Although I had read about and studied poverty and politics in Africa, the experience was still exciting. Around every corner was a new revelation.



Charles Stewart learns to trust a water buffalo during his 2004 trip to Heifer projects in Thailand.

My tour group visited a field overgrown with thorn bushes and threatened by brackish water. The community there was just beginning a Heifer project that would transform that forsaken field into a fertile patch where cabbages the size of basketballs grew. When I returned to this village three years later, I was struck by the midday quiet. Where were all the children I'd met there on my first visit? As the afternoon sun dipped in the sky and I prepared to leave, I finally spotted them walking home from school in their neat uniforms, textbooks in hand. Three years had made an immeasurable difference.

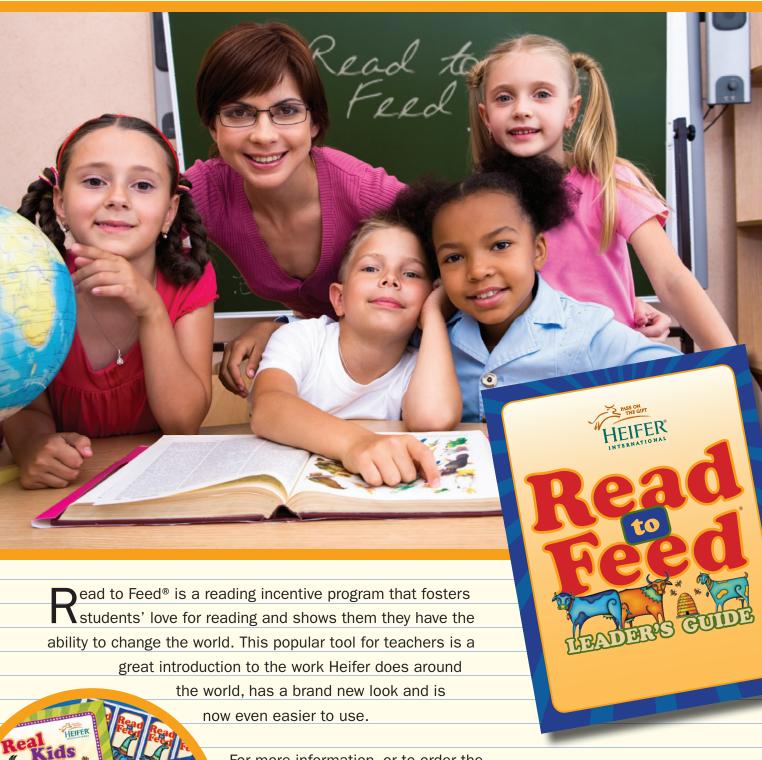
I want to thank you for supporting our mission so families around the world can finally thrive. We cherish your trust and support and look forward to our next 65 years of helping people around the world find their way to selfsufficiency.

Chules & Starret

-Charles O. Stewart

Interim CEO

They'll open a book; you'll open their world.



For more information, or to order the new Read to Feed® materials, visit www.heifereducation.org/read or call (877) 275-READ (7323).





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By Michael Pollan

In your choices about food, you express what matters to you, book author Pollan says in this excerpt from the DVD Nourish: Food + Community.

COVER: Theerawat Pitakpraisri takes pride in caring for the water buffalo he received from Heifer International, fulfilling a childhood dream. Cover and top photo by Russell Powell.

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Learning the Cornerstones

Readers Respond



WORLD ARK JR.

I had a light bulb moment when reading *World Ark* this morning.... You should consider publishing a *World Ark* Junior for grades 3-5 that schools can order class sets of and read in classrooms. I teach third grade and my class uses *Time for Kids*, which does have current events in it. However, I would love to have something like *World Ark* that not only has news about what is going on in the world, but also the difference some people are making to improve the lives of others. What a powerful message to send to children! I would be the first to order it.

ANDREA PAYNE Lewistown, Mont.

THAT COVER GIRL SMILE

I love your magazine and seeing success stories and happy folks with their Heifer livestock. On your cover of the Spring 2010 *World Ark*, the woman holding the goat has a great smile and perfect teeth. I think we all would want to know her secret for those lovely teeth. In fact, looking at the pictures on Pages 10-11 of her partners in Nepal, they all have great smiles. If it were not for that picture, I would have thought you retouched the cover picture to make your "cover girl's" teeth look good. Is it something in the water?

SUSAN HEATON Coquille, Ore.

Editor's note: It's not uncommon for people in developing countries to have lovely teeth. That's because their diets are often based on whole grains, fruit and vegetables, rather than the high-sugar foods we're so fond of in the West.

PRICELESS JOY

After reading the Charles Stewart story and his continued role over the years, he sends a clear and moving message of how we all can make a contribution to others. I believe this will encourage people to become more involved in the future.

When I first heard about Heifer some years ago, former Secretary of State Madeleine Albright highlighted it as a guest on the *Oprah* show. I was inspired to learn that I could make such a difference throughout the world. It gave me a sense of joy, which is priceless.

The dollar amount was within my reach. My plans are to continue my effort in addition to passing the word on.

ROSETTA GARRETT Jamaica, N.Y.

READ ALL ABOUT IT

What a great issue of *World Ark* (Spring 2010)—so much great health and healthy planet info! It should be on the newsstands. Maybe that is a direction/goal for *World Ark*?

MARILYN KLASSEN Elkhart, Ind.

Editor's note: We have no immediate plans to put World Ark on the newsstand, but we encourage people to pass their issues on for others to share.

PIG SLAUGHTER

I read the article "Pandemics, Pigs and Peasants" in the Spring 2010 issue with much interest. Having visited Cairo in October 2009, I was struck by the trash even in the best areas. I toured with four different guides, some Christian and others Muslim. None would talk about the Zabaleen or how the trash issue was so virile.

While attending the International Film Festival in Palm Springs in January 2010, I saw *Garbage Dreams* about the Zabaleen and the trash issue by director Mai Iskander. The problem started in 2003, when Cairo contracted with foreign companies to pick up the trash and did not hold them to the standards of recycling that the unpaid Zabaleen had obtained, which was 80 percent.

The slaughtering of the pigs compounded the problem, especially after the Western waste collectors were fired. It makes me wonder how well we measure up in the recycling statistics.

JUDITH ALLEAN WOLF Fremont, Calif.

We want to hear from you! Please send your comments to worldark@list.heifer.org.

Include your name, city and a telephone number or e-mail address. Letters may be edited for length and clarity, and may be published online as well as in print. Because of the volume of mail we receive, we cannot respond to all letters.



Keep an eye on Heifer's work around the world and stay up-to-date on hunger and poverty issues with our new blog. Daily contributors post photos, video and reports from the field.

Visit the blog at www.heiferblog.org

This combination is pumped down underground and is shot at extremely high pressure into the rock formation, resulting in fissures in the rock that allow the natural gas to flow out of the pockets in which they have been contained for hundreds of millions of years. Between 30 and 70 percent of

that erstwhile freshwater remains un-

derground, never returning to the nat-

ural hydrological cycle above ground.

HEIFER

ARNOLD M. FROGEL
New York, N.Y.

金星 學 历疆

How is it that we are so incapable of learning the simple lesson that when we work abroad, we have to listen and do what is appropriate to the local culture and people? We say it, but when the rubber hits the road, we don't do it. I have worked in 14 countries for five different organizations and in every company, save one, I had to fight with them over this very issue. In every case, I lost. What will it take to learn this simple lesson?

DIANNE POST *Phoenix*, *Ariz*.

WASHED AWAY

I had to respond to the letter from Glenn Shrom of Shartlesville, Pa., titled "A Fresh Look at Water Use" printed in your Spring 2010 edition. The writer overlooked one particular industrial use of freshwater that could certainly be called "consumption" by his definition of that word. I'm referring to the process of extracting natural gas from low permeability tight shale geological formations using high volume horizontal hydraulic fracturing, as is occurring in his state, in areas underlain by the Marcellus Shale Formation. That process uses from one to five million gallons of freshwater, laced with over 260 chemicals, many of them toxic to life, combined with sand, at each well site.

Q&A SPRING

If you could visit a Heifer project anywhere in the world, where would you go? Why?

E-mail your answers to worldark@list.heifer.org. Please limit your answer to 250 words or fewer. We reserve the right to edit responses for length, clarity or grammar.



INTERIM CEO Charles Stewart



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Since 1944, Heifer has helped 12.5 million families in more than 125 countries move toward greater self-reliance through the gift of livestock and training in environmentally sound agriculture.

Heifer International is a member of InterAction, the largest alliance of U.S.-based international development and humanitarian non-governmental organizations, and of Global Impact. Federal and state employees may designate gifts to Heifer through payroll deduction by entering CFC #12079.

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Opinions expressed in *World Ark* are those of the authors and do not necessarily reflect the views of either the magazine or Heifer International.



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FOR THE RECORD

Facts & Figures

Grains

HUMANS GET ABOUT 48 PERCENT OF THEIR CALORIES FROM GRAINS, ACCORDING TO WORLDWATCH INSTITUTE. WHEAT AND CORN TOP THE LIST IN PRODUCTION BY WEIGHT AND ARE NOW GROWN ON ALL SIX HABITABLE CONTINENTS. BUT THERE ARE OTHER GRAINS THAT MANY PEOPLE AROUND THE WORLD DEPEND ON AS FOOD STAPLES.

WILD RICE

A different genus from common rice, wild rice is native to North America and grows in shallow waters of the Great Lakes region.

AMARANTH

This tiny grain was a staple of the Aztecs and Incas. Even though it's not a major grain crop, amaranth's tiny seeds ensure that it is widespread. Wild amaranth can be found on roadsides and empty fields throughout the U.S., where it is commonly called pigweed.

SORGHUM AND MILLET

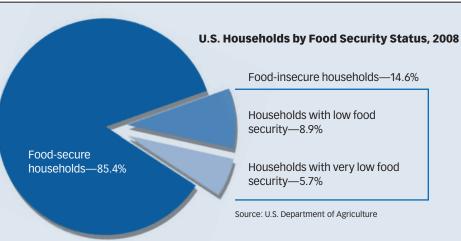
Sorghum, sometimes called milo, is the world's fifth most important cereal crop. It is grown in many tropical areas, especially West Africa. Millet is a staple crop in western and central Africa, where some varieties are thought to have originated. It has also been grown in eastern Asia for thousands of years.

QUINOA

Native to the Andean region of South America, quinoa (KEEN-wah) is not a true grain but is the seed of a plant more closely related to spinach. Quinoa can be grown at high altitudes.

14.6%

of American families were food insecure in 2008, meaning that "the food intake of one or more household members was reduced and their eating patterns were disrupted at times during the year because the household lacked money and other resources for food," according to the Department of Agriculture.



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Algae Bloom

A satellite image of Lake Atitlán in Guatemala, taken in late 2009, shows the extent of a cyanobacteria, or blue-green algae, bloom. Cyanobacteria are toxic to animals and humans and, when dense enough, can deplete a body of water of oxygen. The algae bloom occurred due to sewage and agricultural runoff from surrounding villages and fields, which supplied the algae with nutrients. Cleanup will cost at least \$32 million, according to the Guatemalan government.

Jargon

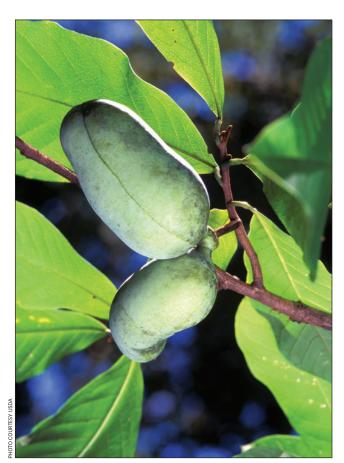
COLONY COLLAPSE

DISORDER: the

mysterious phenomenon first reported in late 2006 in which the number of bees in a hive suddenly drops dramatically or disappears altogether; commonly referred to as CCD.

Tips for Better Living

The Poor Man's Banana



awpaw fans can't figure out why they're the only ones in on the secret. This sweet, custardy tree fruit about the size of a baking potato grows well throughout most of the United States, especially in the Midwest. They're the largest edible fruit native to North America and were once so abundant that they sustained Lewis and Clark on some of their explorations. Pawpaws look a lot like papayas, which may explain how they got their name. They taste more like bananas and are also sometimes referred to as the poor man's banana. Their nutritional value exceeds that of apples, peaches and grapes in vitamins, minerals, amino acids and calories. If you don't yet have pawpaw trees growing in your yard, you could plant them in the fall, although spring planting is best, said Kirk Pomper, a horticulturalist and pawpaw expert at Kentucky State University.

It is important to control weeds and grass around the trees during the first several years after planting, Pomper said. "We place straw or wood chip mulch about three feet around the stem of the tree at planting to control weeds and grass. It is important to water the trees each week if rainfall is not plentiful."

Bees pollinate most tree fruits, but pawpaws rely on flies or beetles attracted by the meaty color and fetid smell of the tree's unusual flowers. These flowers are not self-pollinating and require pollen from a genetically different tree to be fertilized, so trees should be planted in pairs.

For more tips on planting and caring for pawpaw trees, visit **www.pawpaw.kysu.edu**.

Feeding the Kids During Summer Break

Roughly 19 million U.S. children rely on free and reduced-price cafeteria lunches during the school year, and those kids still need help keeping nutrition levels high in the summer months. Unfortunately, only about 2.3 million of these kids participate in the Department of Agriculture's Summer Food Service Program that makes balanced meals available to them when classes aren't in session.

Luckily there are ways to serve more of these children during the summer months. The department is always looking for community centers, churches and other facilities that can serve as makeshift caf-

eterias. If you don't have a building to offer, you can sign up to chaperone, teach or entertain instead. Children are more likely to show up at a summer meal site if there are fun or educational activities happening there around mealtimes. One of the biggest challenges for the Summer Food Service Program in rural areas is simply getting the food and the children to the right spot. Volunteers are often needed to drive.

Find out how to sign up or offer your facility for the Summer Food Service Program at **www.fns. usda.gov/cnd/Summer**.



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Building Bamboo Bikes

rooklyn bicycle builders are spreading the gospel of bamboo as a cheap, durable, renewable building material suited equally to bumpy dirt paths and slick city streets.

At the Bamboo Bike Studio in the trendy Red Hook neighborhood, the proprietors devote their weekends to helping would-be cyclists build their own custom wheels with bam-



boo harvested from overgrown New Jersey gardens. The bike shop supplies bamboo and components; participants provide the labor. A fee of about \$1,000 covers the cost of supplies and instructions. The workshops are attracting people from across the country and beyond, and they fill up fast. To save your spot, visit **bamboobikestudio.com**.

But the bike shop bustles the rest of the week, too. As part of its collaboration with the Columbia University Earth Institute-based Bamboo Bike Project and the Millennium Cities Initiative for development, the Bamboo Bike Studio provides testing and prototype construction at no cost. The ultimate goal is to help establish bike factories in Ghana, Kenya and Ecuador that use local labor and materials to boost the local economy by providing jobs and reliable, inexpensive transportation.

Harvest: Artichokes

t's artichoke season, and although these spiky green globes grow best in California and the Mediterranean, new varieties are available that grow in most parts of the United States.

To the uninitiated, eating an artichoke can be intimidating. Cut into it? Peel away the leaves first? Just take a bite? Don't worry; it's easy. Instructions are below.

Simple Steamed Artichokes with Butter

To prepare artichokes for steaming, slice off the top ¾ inch of the artichoke, snip off the thorny leaf tips, and remove small leaves around the base of the stem. If the stem is long, cut it so only about an inch remains. Rinse.



In a large pot, bring a couple of inches of water to a boil. Add a bay leaf. Using a steam basket, steam the artichokes for 25 to 45 minutes, until the leaves come off easily. Spritz the artichokes with lemon juice, and serve with melted butter.



To eat them, pull off a leaf and dip it into the butter. Hold the base of the leaf tightly and put it in your mouth. Use your teeth to scrape off the soft part of the vegetable. Once the leaves are gone, scrape out the inedible fuzzy part, called the choke, to get at the delicious artichoke heart. Cut it into pieces and dip in butter.

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Eat Real Food

Marion Nestle lets no foil-wrapped treat or fluorescently alluring drink go unchallenged in her campaign to expose what she calls dodgy marketing ploys meant to sell Americans on processed foods. On her blog, www.foodpolitics.com, she tangles with corporations and government agencies that hurl fierce criticism right back at her. Author of books on the scientific, economic and social influences of food choice such as *Food Politics: How the Food Industry Influences Nutrition and Health* and *What to Eat*, her day job is professor in the Department of Nutrition, Food Studies and Public Health at New York University. She has a doctorate in molecular biology and a Master of Public Health in nutrition.

Interviewed by Donna Stokes, World Ark managing editor

WorldArk: Why do you think people are confused about nutrition and healthful eating?

MARION NESTLE: It has to do with research, specifically the way the press covers research, and also with marketing. Much of it is focused on single nutrients rather than food. And the minute you start talking about single nutrients and not food you're in trouble, because unprocessed foods contain lots and lots of nutrients required in the human diet in different proportions. When you're eating a varied diet, you don't give it another thought.

But variety, moderation and balance are a hard sell to the public. Nobody really knows what those things mean. And there's so much marketing around specific nutrients that people are eating the most ridiculous products, thinking they're good for them. PowerBars leap to mind. I think they're a ridiculous product because they don't taste very good. Why would you want to eat something

like that when you could eat real food?

Explain why you're fed up with food companies' health claims displayed on food packaging.

In a funny sort of way this kind of marketing isn't supposed to appeal to your higher cognitive functions. You're not supposed to really notice them. Take for example the "immunity" banner on Cocoa Krispies cereal. I was just floored by that; how do they get away with saying that? By allowing some of these claims, the [Food and Drug Administration] isn't doing its job very well.

If you're a customer coming into the store, you're supposed to think "this cereal has antioxidants in it, so if I buy this cereal it's good for my kid." So I can buy this junky, sugary, low-fiber cereal for my kid, and it'll be fine because it's got all of these good things in it. But what you're not thinking is that your kid is unlikely to be short of those things anyway, if you're feeding her a vegetable now and then. I think it has to do with the way we're hard-wired, because everybody falls for those messages. It's very hard to shift into critical mode when you're in a hurry and you just want to get food and go home.

So what should change?

I think people should be eating real food and as little processed food as possible. We have a big obesity problem, with many of the excess calories in people's diets coming from junk foods. So I want to shift people away from the middle aisles of the grocery store and into the peripheral aisles. And also do something about portion sizes. If it is served to you, you don't always stop to think, "Oh my heaven, that's enormous, if I eat that much I'm going to be taking in three times as many calories than if I only ate a third of it." You don't go through that. You just eat it and it tastes good. Somehow there's room for it.

I'm one big believer in regulation in the food area. Companies, left to their own, will sell more food. That's their job. They don't care how they do it. So I think we need some checks and balances. If it were up to me we wouldn't have health claims on food products at all.

Can you have a business-friendly economy and a focus on good nutrition?

This is how capitalism works—the strong win and the weak lose. I'm not against business, and I'm not even against the right to make junk foods. I think companies have a right to make junk foods; people have the right to eat junk foods. I'd just like to see the proportions shift. Junk foods are not everyday foods. People should not be eating at McDonald's every day. When my kids were little they went to McDonald's on their birthdays; it was a really big deal. And I wouldn't have another thought about that. But every day? That's not a good idea. There are plenty of people who eat these foods every day and think that's normal, think that that's what you're supposed to eat because they're heavily advertised.

Explain what you mean when you say hunger should be addressed as a social, not technological, problem.

When you've got hungerin developing countries, it has to do with the fact that people are poor. The people are disenfranchised—their governments are inadequate to maintain stability, they're at war, they've had natural disasters. The hunger results from the fact that people don't have access to education, housing, transportation or political stability, and so you have to solve those problems before you can



Marion Nestle visits Heifer Headquarters in Little Rock, Ark.

have a sustainable solution.

My favorite current example of a technological solution is Plumpy'Nut. It's this sugary, peanut butter supplement given to kids in disaster situations. I think it's completely unsustainable. It's a 500-calorie peanut butter supplement in a foil pack. Studies have shown that if you give kids this treat they do much better than kids who don't get it. Of course they would, it's 500 calories. I think it's a really bad idea. Somebody has to pay for them; they get brought in. You get kids thinking they're supposed to eat food that comes in packages. It's sweet, also not a good idea. In that situation you're much better off eating local foods. But if you want to come in to those situations to teach people how to make and eat local foods, it is a much slower, more difficult task, especially in places that don't have stable governments. These food aid things come in,

disrupt the local food supply, and then the suppliers leave.

What is your solution for the concern that healthy, organic, locally grown food is available only to the wealthy and not the poor or those on food stamps?

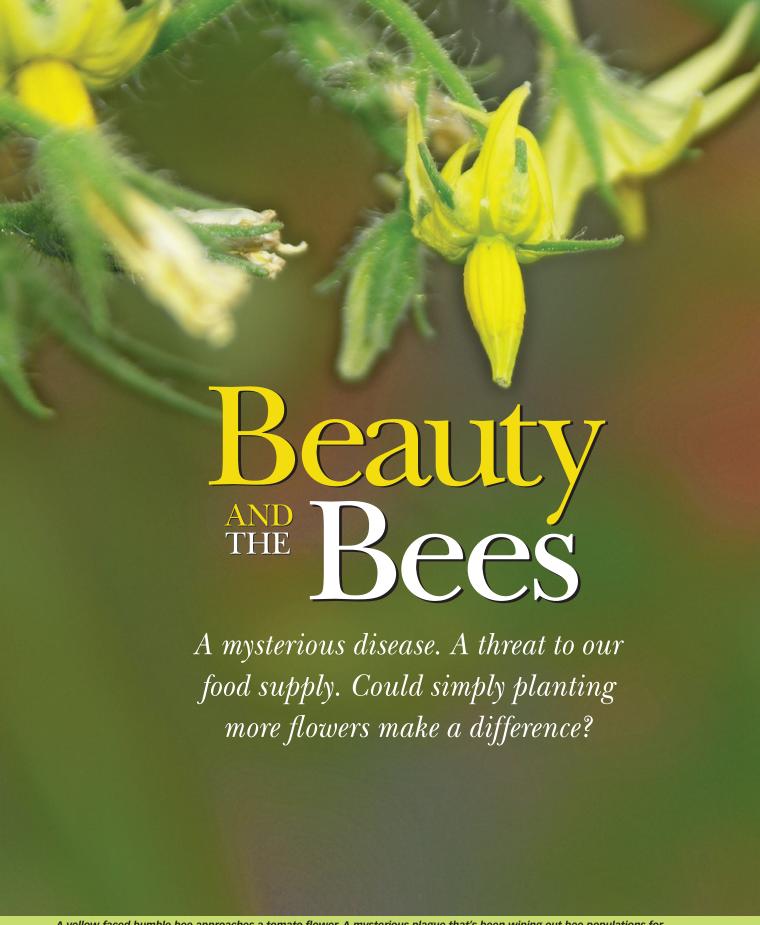
My first question is why should poor people have worse food than rich people? Almost everyone I know who is involved in this food movement wants everybody to have access to this kind of local foods. You have to ask the questions why are fruits and vegetables inaccessible in low-income areas? And why are fruits and vegetables so disproportionally expensive? That has to do with federal policy, what gets subsidized. So this is about politics. This isn't about elitism. We've made choices as a society to make corn, soybeans and wheat very cheap. Subsidized. We have made choices as a society to not subsidize fruits and vegetables, or organics. So that's a choice. We could change that choice.

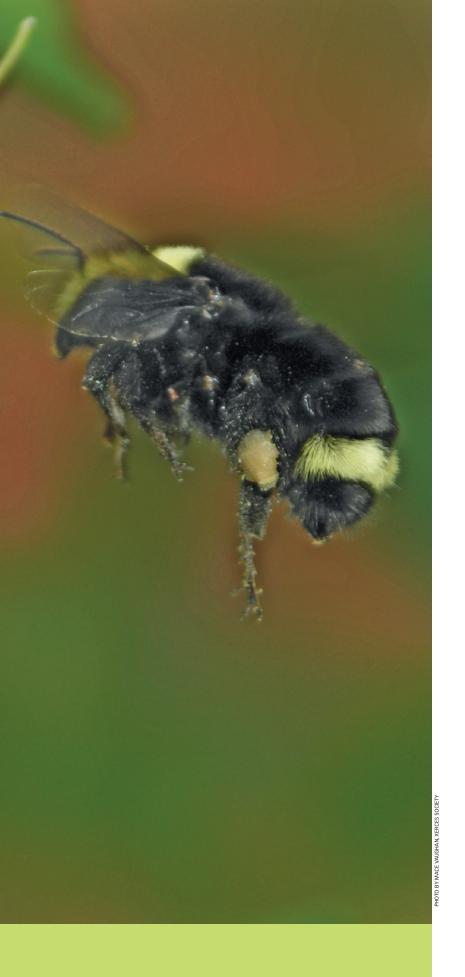
How would you sum up your food philosophy?

Eat less, move more. Eat real food, not products. Support local farmers and grow food at home. Cook at home. Teach kids to cook; that's the most revolutionary thing you can do from the standpoint of food.

I don't think it's any more complicated than that. Learn how to deal with food marketing. Understand that this is about democracy: Of the people, by the people, for the people. Is that too idealistic? I don't know. I think it works.

To read more, visit Nestle's blog at www.foodpolitics.com.





By Sarah Schmidt World Ark contributor

N THE OMEG FAMILY'S Oregon cherry orchard, a 10-foot perimeter of goldenrod, catmint and blanket flower surrounds the 350 acres of trees. The flowers run between the rows, too, and in one section of the orchard, four 30-foot diameter circular patches sport a host of native prairie grasses that produce flowers of their own. It's a lovely display, but Mike Omeg, the fifth-generation family member who now runs the orchard, didn't work untold hours over the past three years just to make his farm prettier. The flowers host several species of bumblebee, orchard mason bees and sweat bees, all of which are, well, busy as bees, as they fly from blossom to blossom doing what they're uniquely qualified for-pollinating food crops.

Four years after scientists first noticed that a mysterious insect plague known as colony collapse disorder was wiping out honeybees around the globe, the exact cause has yet to be determined. In the meantime, many small and midsize farms aren't waiting to hear the solution to the whodunit. Instead they're enlisting more bees to pollinate their crops by luring them in with food, water and custommade habitat, thanks in part to incentives in the latest U.S. farm bill. Though just a handful of farms have begun to put such methods to the test, their success could be an important component to averting a pollination crisis—and increasing food security worldwide.

The dramatic drop in the world bee population isn't just about honey. In fact, about one-third of all food crops worldwide depend on insect pollination. Everything from almonds to apples to cucumbers to soybeans—\$15 billion worth in the United States alone, according to the latest Department of Agriculture estimates—are at risk. And while scientists are still working intently to pinpoint the causes of the mysterious syndrome, annual honeybee losses continue to hover around an alarming 30 percent. "We have just enough bees right now, but we're near the tipping point," said Marla Spivak, entomologist and professor of apiculture at the University of Minnesota. "We rely on pollination for so many crops—the impact could be severe."

VANISHING HABITAT

Ever since people first began to cultivate food crops, bees have been pollinating many of them. And until very recently, the job was done efficiently and free of charge by whatever pollinating insects were native to the area. "When our landscape was more diverse, pollinators had plenty of varied habitat," explained Eric Mader, national pollinator outreach coordinator of the Xerces Society, a nonprofit devoted to invertebrate conservation. In the past, a wider variety of wildflowers, trees and grasses bloomed at different times of year and provided a steady stream of pollen and nectar for wild bees. Farms also provided food and shelter, since most rotated food and cover crops like clover. But the landscape of most industrialized countries—and, increasingly, developing ones—has changed drastically over the past 50 years.

Farmers must now pay beekeepers to deliver colonies to their fields for pollination services during the crucial window when their crops are in bloom.

Small family farms with several different crops have largely given way to large, single-crop fields, and pesticide use has increased dramatically. At the same time, undeveloped natural areas that might have harbored wild bees are shrinking or disappearing. Also, there's the double whammy of pesticides. Insecticides aimed at wiping out harmful insects can





often do the same to bees. Even small exposures can put severe stress on their immune systems, leaving them vulnerable to diseases. "And then you have the herbicides that are killing the weeds, but it turns out that bees need weeds for food," said May Berenbaum, entomologist at the University of Illinois.

The beekeeping business has also been changing. Before World War II, there were about half a million colonies of





Mike Omeg's cherry trees (top) burst into bloom at his orchard in Oregon. On a central California farm (left), bees pollinate apple blossoms while a bumble bee (right) visits a hyssop flower. About one-third of all food crops worldwide depend on insect pollination.

managed honeybees in the United States. They were raised not only for their honey, but also for wax, which was widely used for everything from candles to the waterproof coating on raincoats for the U.S. military. Though they were fed and housed by beekeepers, they also helped themselves to the nectar and pollen from surrounding plants. "Back then, a beekeeper might pay a farmer a small rental fee to keep them on his land, or maybe just let them loose in a natural

area," said Kim Flottum, editor of the trade journal *Bee Culture* and a beekeeper himself.

But in the 1950s, the United States started to import cane sugar. Petroleum products began to replace beeswax. Changes in trade policies caused the price of imported Chinese honey to drop to competitive levels. As a result, demand for U.S. honey fell dramatically and now supports only about half as many managed colonies. At the same time, the number of acres devoted to pollination-dependant crops doubled in the United States. "So now we have about half the bees and twice the work," Mader said. And of course this is on top of the decline in wild bees.

As a result, farmers must now pay beekeepers to deliver colonies to their fields for pollination services during the crucial window when their crops are in bloom. Such services are in high demand—instead of a beekeeper paying a farmer, U.S. growers are now paying up to \$130 per colony for honeybee rental for some crops, a fourfold increase in the past few years, Flottum said. In Western Europe and most of the developing world, native pollinator declines have also led farmers to rely on honeybee rentals.

STRANGE, SCARY PHENOMENON

It wasn't until 2006 that two things brought the plight of bees to light—the emergence of colony collapse disorder (CCD) and a report from the National Research Council on the decline of North American wild and domestic pollinators. The council's report was one of the first sources to document major losses of domesticated bees and reveal evidence of dramatic declines of wild ones. It warned of impending agricultural consequences. That same year, beekeepers across the U.S. began to see a strange, scary phenomenon in their hives. Entire colonies of adult bees would vanish without a trace, leaving the queen and young brood behind. "There have always been lots of things that kill bees-mites or disease, for example. But then you usually see dead bees. With true CCD, they'd just disappear," Flottum said. That year, and most years since, the Apiary Inspectors of America's annual census has been documenting losses of around 30 percent each year, where 15 percent used to be the norm.

Meanwhile, other countries also began to see dramatic declines in both honeybees and wild pollinators—some of

which fit the colony collapse disorder pattern and some of which had other hallmarks. "We've seen a lot of cyclical declines over the years, but not like this. We call it CCD sometimes just because we don't know what else to call it, but the point is, around the world, bees are in trouble," said Gabriella Chavarria, a conservation biologist with the Natural Resources Defense Council.

Beekeepers in the United Kingdom and Europe have been losing about 30 percent of their colonies annually for

In China, the problem is so severe that practically all of the bees in the country's apple- and pear-growing regions have been wiped out. Chinese workers must pollinate by hand, climbing ladders and dipping Q-tip-like tools made of bamboo shoots and chicken feathers into every blossom.

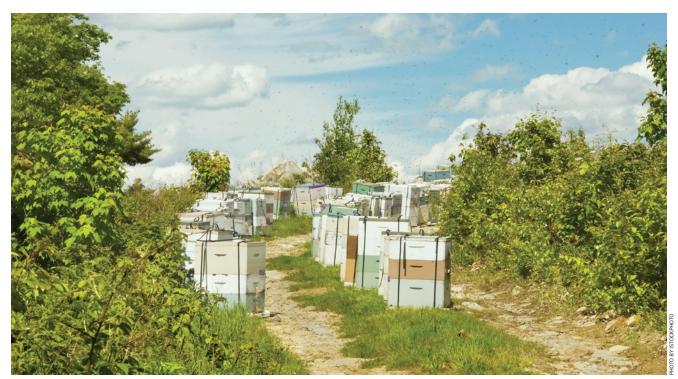
the last several years, and while less data is available in the developing world, anecdotal evidence points to problems. In Argentina and Chile, the beekeeping business is on the verge of collapse due to colony losses. In China, the problem is so severe that practically all of the bees in the country's apple- and pear-growing regions have been wiped out. As a result, Chinese workers must pollinate by hand, climbing ladders and dipping Q-tip-like tools made of bamboo shoots and chicken feathers into every blossom, according to a report from the U.N.'s Food and Agriculture Organization. In Brazil, too, where large, mono-crop farms are becoming increasingly common, passion fruit crops are now pollinated by hand.

MORE THAN ONE CAUSE

In North America, entomologists are still zeroing in on the exact causes behind colony collapse disorder, but almost everyone agrees that a perfect storm of factors is responsible. "Not only do you have habitat degradation, but you have globalization, which allows imported bees to bring

Pollinator plants surrounding crops help increase farm yields. In some countries, the crisis is so severe farmers must pollinate crops by hand.





Beekeepers are often paid to deliver hives to farms at pollination time, as shown in this Maine blueberry field. Honeybee losses continue to hover around 30 percent a year, according to the U.S. Department of Agriculture.

diseases in more readily, and then of course [you have] pesticides," said Berenbaum, whose research pinpointed one of the specific viruses involved. But no matter what's behind colony collapse disorder, the important lesson to be learned may be that our current environment is simply leaving bees too vulnerable. "It's like this," explained Flottum. "If you're healthy and you walk into an elevator and someone sneezes, you probably won't get sick. But if you haven't been eating well, you've been stressed, overworked, in crowded conditions for weeks or months, breathing in chemicals, and you walk into that same elevator and someone sneezes, well, you probably will." Most experts agree that the key to avoiding the next pollination crisis will be to make the world a better place for bees in general.

That's where strategies such as Oregon orchardist Mike Omeg's pollinator habitat idea come in. "We can't put the genie back in the bottle, but we can integrate some of the best practices from the past into what we've learned about the future," said Claire Kremen, a conservation biologist at the University of California, Berkeley. Kremen is one of a small cadre of pollination experts who have researched ways to bolster native bees.

Recently, the Xerces Society, using studies from Kremen and other pollination specialists, developed a program to teach farmers how to incorporate patches of bee and butterfly habitat into cropland and the surrounding areas. Xerces enlisted a range of different fruit and vegetable growerscherry farmers like Omeg in Oregon, apple producers in Kentucky, sunflower and tomato growers in California, organic vegetable farmers in Wisconsin—to participate. Some states and universities have launched similar local programs. All together, 10,000 acres of U.S. farmland are on board via Xerces, and the results of the project's findings could point the way for many more.

The idea is simple: rehabilitate a small portion of farmland so that it closely resembles the wild natural areas that once hosted bees and other beneficial insects. Yet the implementation can be tricky. Omeg, for example, who has a master's degree in entomology, had tried years ago to create a similar habitat plan of his own to little avail.

HELP FOR FARMERS

Motivated by both colony collapse disorder and the 2006 National Research Council findings, the Xerces Society culled existing research on pollinators and produced detailed guidelines for farmers in several different states, which the group has promoted since 2007. The plan picked up momentum last year after a portion of funding from the 2008 U.S. farm bill helped reimburse farmers for startup costs. Mader and other scientists from the group also visit farms to make specific recommendations based on climate, geography and existing growth.

"A lot of the farmers interested in doing this are organic or otherwise embracing sustainable agriculture, but we're also just attracting those paying a lot to rent honeybees."

—Eric Mader, native pollinator outreach coordinator of the Xerces Society

"Eric [Mader] came out on a cold day last winter and walked around the farm with me. Then we sat around the kitchen table and came up with a plan," said Deirdre Birmingham, who farms 60 acres of organic cider apples in Wisconsin. With Mader's help, she decided to plant spruce trees and barberry shrubs as a windbreak, both of which provide habitat for bees. "This was something I was going to have to do anyway, so now I'm just getting more bang for my buck, and it doesn't cut into my acreage at all," Birmingham said. She also planted a small prairie of Indian grass and little bluestem, as well as wildflowers like purple coneflower, evening primrose, goldenrod and brown-eyed Susans. The prairie attracts mason bees and other wild bees and provides nectar and pollen for the four hives of honeybees Birmingham and her husband raise.

Another major benefit is that such habitat also attracts beneficial insects that are natural predators to pests. "I haven't had to treat for cabbage worms in five years," said



Mike Omeg (at right in cap), hosts a training workshop on bee pollination at his Oregon orchard. He's been working for three years to make his farm bee friendly.

Harriet Behar, an organic vegetable farmer also in Wisconsin. Behar's 300-acre farm includes a 10-acre meadow that she is working to rehabilitate with help from the Xerces Society and a state agency devoted to sustainable farming. She's noticed better yields in the areas near the meadow and has seen plenty of new wild bees and beneficial insects buzzing around on her farm.

She also uses other tactics, like rotating her food crops with clover, to make her farm bee-friendly. "When you have a diverse ecosystem like this, you might get problem insects for a short time, but then you have an army of beneficials ready to attack and eat them," explained Behar, who attributed her lack of cabbage worms to the parasitic wasps living in the meadow. And though organic farms may have the most interest in chemical-free pest control, conventional farms also stand to benefit, too. "A lot of the farmers interested in doing this are organic or otherwise embracing sustainable agriculture, but we're also just attracting those paying a lot to rent honeybees," Mader said.

Of course the success of the program will come down to the bottom line—and that's yet to be determined. Kremen's research shows that farms with 30 percent of land within three-quarters of a mile of the crop devoted to natural habitat won't need to rent bees. But anecdotally, farmers report noticeable benefits with a lot less land set aside. Xerces will gather data from participating farms over the next several growing seasons and present cost-benefit guidelines soon after. Some farmers are eager to invest immediately. "Honestly, I haven't priced it out yet, but once it's established, there aren't a lot of ongoing costs," Birmingham said of her two-year-old prairie.

Proponents stress that this approach is likely only a part of what's needed to restore the world's pollinators to safe levels—but it may be that it's the part that's been missing so far. "Ultimately, what we need to do is think about how to change farming itself, and we'll need a range of strategies to do it," Kremen said. Other approaches have also found some success: Improved nutrition and more aggressive parasite and disease management have also done some good. In Europe, aggressive pesticide management has been the

primary strategy, with Germany and France banning certain pesticides and Spain and the United Kingdom expected to follow.

A positive side effect of colony collapse disorder is the increase in international discussion on the best ways to improve the environment to counter the global pollination crisis, Flottum said. "Research support had really dwindled over the years," he said. But headlines about the disorder motivated scientists to investigate causes and solutions. And farmers are beginning to see, from a bee's perspective, the beauty in a diverse and colorful landscape. "All of this attention can only be good for everyone."

Sarah Schmidt is a freelance writer based in Brooklyn, N.Y. Her work has appeared in The New York Times, New York Magazine, OnEarth and Plenty.

BEE OF HELP | SARAH SCHMIDT



Create a bee-friendly garden. Bees need a steady stream of blossoms to provide pollen and nectar, so plant a variety of plants that bloom at different times. Native wildflowers are especially good since they've co-evolved with the local pollinators. Both the Xerces Society (www.xerces.org) and the Pollinator Partnership (www.pollinator.org) provide lists based on your region. Bees will also need a place to live. The Xerces Society has detailed information on how to provide nesting spots.

Think before you spray. Pesticides used for lawns and gardens can harm bees in the same way agricultural chemicals do. "The general public sprays massive amounts of pesticides on the lawn because they think they need to control mosquitoes, and usually it's not necessary," says Gabriela Chavarria of the Natural Resources Defense Council. At the very least, spray after dusk, when bees are least active, and try to avoid broad-spectrum pesticides.

Hit the farmers market. Here you're likely to find growers that use pollinator habitat, integrated pest management or organic methods, all of which are better for bees than conventional farming. While you're there, be sure to look for a local honey producer. Supporting domestic beekeepers can help them stay in business while they battle colony collapse disorder. Local beekeepers also limit the need to import honey, which has been linked to the spread of bee diseases and parasites.

Become a beekeeper. Raising bees as a hobby can help strengthen the pollinator population. Check out www.beesource.com for resources or pick up Kim Flottum's beginner's guide, The Backyard Beekeeper.



Back from the Brink

In northern Thailand, the change in one man's life and his village is testimony to Heifer's transformational power.

By Jaman Matthews, World Ark senior editor

Photos by Russell Powell

BAAN SAEN SUK, THAILAND—Thirty years ago, Theerawat Pitakpraisri was a young boy in a

remote village of northern Thailand in a desperate situation. His father was a drug addict and his mother an alcoholic.

Theerawat's village, Baan Saen Suk, lies just south of the border with Myanmar and west of Cambodia, in an area known as the Golden Triangle, infamous for its drug trade. The isolated area near the Mekong River became a conduit for drug trafficking, especially for opium. Easy access to

drugs devastated many villages in the area.

When Heifer International first came to his village in 1974, Theerawat asked for a water buffalo, but he was too young, and his parents were deemed unfit to be entrusted with an animal. Theerawat made a promise to himself that one day he would be a part of a Heifer project and have his own buffalo.

"For hill-tribe people like us, animals mean everything," he said.

Fast-forward to 1997. Theerawat, a respected young man in the community, was elected leader

of Baan Saen Suk, the equivalent of mayor. But Baan Saen Suk was still a dirty and depressed village. It had no paved roads, no concrete buildings. The streets were filled with garbage. At that time, according to Theerawat, the poorest people in the community made only about 4,000 baht (about \$125) a year. So as his first order of business, Theerawat developed a proposal for a Heifer project.

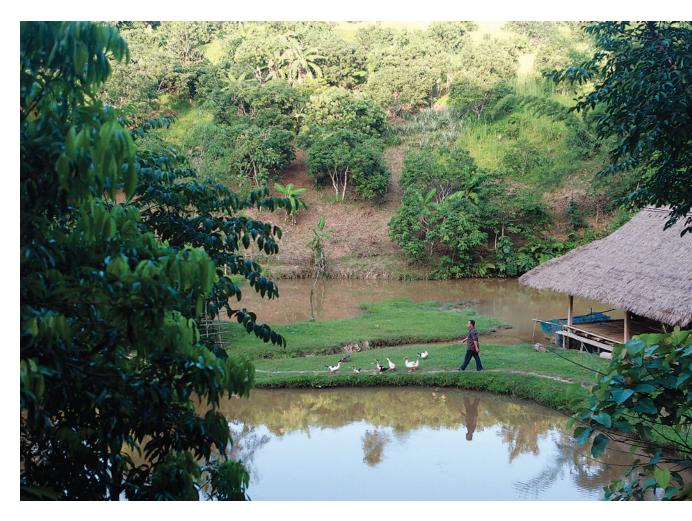
a proposal for a Heifer project.

The village received 27 pigs to help community members generate income not dependent on the illicit drug trade, the main source of income in the area.

"When I came to work as the community head, I tried to improve everything," Theerawat said. "The main thing is, I raised awareness and encouraged them to transform themselves and the community."



Southeast Asia's Golden Triangle



"Now that my life has improved and I have more opportunities, I would like to extend that to others."

—Theerawat Pitakpraisri

A VILLAGE REBORN

On a recent morning, Theerawat, neatly dressed in blue slacks and a plaid button-up shirt, led a tour through a very different Baan Saen Suk than the one he inherited more than 10 years earlier. Walking down a paved street lined with small but sturdy concrete houses, he paused every few minutes to check his constantly chirping cell phone. He continues to work for community development as a facilitator for Heifer projects, though he is no longer an elected official. An intensely focused and industrious man, he bounces from one meeting to another to discuss the impact of cell-phone towers or the need for community health centers.

"Before, they threw their waste anywhere," Theerawat said of the villagers as he passed one house. "There was a lot of garbage around the community. You could find rubbish everywhere."



(Above) Theerawat Pitakpraisri built a training center, including livestock and three ponds, to educate area youth.

(Right) In Baan Saen Suk, Buyum Panasaensukja has a legitimate source of income from the pigs she received from Heifer.

It wasn't only garbage that littered the community. Animal dung was also a problem, in roads and open spaces, even inside homes, Theerawat said. In the hills surrounding Baan Saen Suk, large swaths of forest were stripped, cut down over time to make room for cultivation and pasture. As deforestation spread to the headlands of the local river, runoff and animal waste threatened to foul the water source for the whole community. In addition to teaching community members how to properly dispose of their garbage, Theerawat led an effort to build fencing and housing for livestock that put an end to the village's animal-waste problem.

Gone, too, is the drug scourge that threatened to overwhelm the community in Theerawat's youth.

To curb drug trafficking and use,

the national government denied citizenship to anyone suspected of using. At the time of his election, said Theerawat, only 35 percent of the villagers were recognized as Thai citizens. Drug use has since dropped precipitously. As a result, Theerawat said, most of the population here—about 98 percent—received Thai citizenship by 2006.

But he credits a different program with his village's transformation: Heifer livestock projects that continue to give villagers legitimate sources of income. In the years since his election, the annual income of villagers in Baan Saen Suk has increased almost sixteenfold to about 70,000 baht (more than \$2,000), said Theerawat, thanks in large part to the pig and water buffalo projects. Baan Saen Suk was even declared a model community by the head of the province.





A MENTOR TO NEW PROJECT MEMBERS

Theerawat led the way through the streets and pathways of Baan Saen Suk, past the elementary school playground, through fields of rice, to a small cinderblock home on the edge of the village. Red chilies dried in baskets in the midday sun. The sound of pigs squealing erupted from behind the house.

Ator Mayar emerged from the dark interior and greeted Theerawat with a smile. The large man, dressed in a sleeveless undershirt and plaid sarong, motioned toward a rough wooden table and benches under a shade tree in the corner of the yard. He belongs to one of several ethnic groups found in the hills of northern Thailand; he is Akha. Born just across the mountains in Myanmar, he has lived in Thailand for 17 years, a common story in the border villages.

In the early years after his arrival, Baan Saen Suk was a cesspool, to hear Ator describe it. Most of the population—85 to 90 percent, according to him—was addicted to drugs like heroin, opium and amphetamines. But all of that has changed, he said, largely due to the work of the man seated across from him. "Theerawat is an activist," Ator said.

In June 2009, Ator received four piglets as part of a Heifer project. Rising



from the table, he walked to the small metal-roof sty he built for his pigs and scooped up a bucketful of feed.

"I would like to say that, yes, these piglets have changed my life," Ator said as he filled their feed trough. The pigs provided him with enough income to start his own small business, selling fertilizer to other farmers in the village.

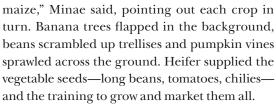
As the pigs fought for position around the trough, his wife, Minae, arrived home from the market where she had been selling pumpkins. Ator quickly conceded that his wife does most of the farmwork for the family.

Minae set down her load and walked into the kitchen garden beside the couple's home. "I grow ginger. I grow (Above) Ator Mayar looks over his pigs, which he received from Heifer International in 2009.

(Above right) Ator said the pigs have improved life in Baan Saen Suk, a village once ravaged by drug addiction.

(Right) Minae Mayar, Ator's wife, cuts bananas in her garden. Heifer supplied seeds for long beans, tomatoes and chilies, and the training to grow and market them.





Throughout the visit, Theerawat alternately stepped in to give advice to the Mayars and stood back, arms folded, smiling with satisfaction. He was pleased with the success of the new project participants. As he led the way from the Mayars back through the village, Theerawat described a new project in his boundless work for the community, one that reminds him of his own beginnings. Theerawat, on his own land, built a farming school to educate a new generation of villagers, including orphans whose parents died of AIDS or drug use.





A LEARNING CENTER AND BOARDING SCHOOL

Turn off the main road into the gate above Theerawat's house and you encounter a large, hand-painted sign in greens and yellows, with Thai lettering in white. It's a map of his land with several gardens, ponds and livestock areas of the learning center.

Theerawat decided to start the learning center two years ago when another organization aimed at educating children abruptly left the village. The departure created a vacuum that could too easily be filled by old habits, like unemployment and drug use, Theerawat said. He wasn't going to let that happen. "I discussed





with my wife that we should continue to support them, even if we have to spend our own money."

And so the couple built three bamboo buildings around their home—a large classroom, a bunkhouse for the students who live here and a small, open-sided dining hall where they take their meals.

Forty-four children, 18 of them orphans, live at the boarding school permanently. Another 40 to 50 students also attend classes here and range in age from 6 to 20 years old. In addition to more traditional subjects, the students study water conservation, agroecology and animal husbandry and put these lessons to work running the farm.

The students are divided into "councils," each with a chairperson, and decide among themselves how best to divide up the group's chores—cleaning, cooking and animal care. They



(Above) Every morning, Mitaw Pitakpraisri cooks breakfast for the students at the training center.

(Above right) Supaluk Pitakpraisri, 18. washes clothes by hand.

(Left) Students lend a hand in the kitchen as part of their daily chores.



also use the councils to discuss how best to live together and use mediation skills they've learned to settle any disputes.

But Theerawat has a larger vision for the learning farm, one that extends beyond the children who live in the boarding school. "I'd also like to promote a curriculum to the local school," he said. "The children who study in the local school can come here and learn from this, too,"

Down the hill behind the new classroom building is a slick trail with footholds cut into the red clay soil. It leads past a clump of banana trees and ginger plants before turning off toward the pigpens. In 1994, Heifer Thailand started a project to improve the local breed of pig. Theerawat received two sows and a boar then, and continued to breed pigs long after the project was over. Now he has eight sows, two boars and more than 20 piglets, and he provides pigs to others in the community as well as for the learning

On this day, Theerawat vaccinated the piglets against intestinal parasites with the help of two students. The boys stopped their morning chores of slopping and watering the pigs to catch the piglets.

"I care for these children; I feel like I'm connected to them. If I stop, I can't imagine where they would go."

—Mitaw Pitakpraisri

They held them squealing by their hind legs as Theerawat injected them. One job done, Theerawat continued to the next on his endless list of daily chores.

Further down the trail, in a small valley, are three ponds where students raise ducks, geese, tilapia and frogs. Up the side of the next hill is an orchard with mango, lychee, rambutan, banana and pineapple. All produce grown here is either sold to pay expenses or carried back up the hill to feed the students.

The learning center and boarding school costs 300,000-400,000 baht (about \$9,000-\$12,000) a year to operate. Local businesses donate money and supplies, and parents donate rice when they are able. But the day-to-day burden must be borne by Theerawat and his wife.

A FAMILY ENDEAVOR

In the small outbuilding that serves as the school's kitchen, Theerawat's wife, Mitaw Pitakpraisri, lit the single gas burner and placed a blackened skillet atop the concentric rings of blue fire. She poured in the oil and, when it was hot, cracked the eggs, which hissed as they struck the skillet. She swirled the skillet then flipped the omelet. Less than a minute later, the omelet done, she scooped it out onto a waiting plate. Then, Mitaw reached for the container of oil and started the process over.

Two teenage girls, both students at the boarding school, chopped vegetables, washed dishes and tended a small charcoal fire in the corner of the kitchen. The girls hurried from chopping block to fire to shelves filled with large pots, all black from the fire.

As children crowded the door of the kitchen, Mitaw stopped briefly, smiled and said, "This is what I work for."

She starts cooking each day about 5 a.m. to have the food ready by 6:30 or 7 when the children arrive at the open-air cafeteria. After early chores, the students who live here full-time wash up and shuffle into the dirt-floor dining area. Each finds the metal tray with his or her number on it stacked on the shelf along the

wall and then finds a place at one of six long tables. The typical breakfast is rice and fried vegetables. Eggs are for special

"Being the wife of a leader is very hard work," Mitaw said, not stopping even when she talked. As she scooped up large bowls of rice from the well-used rice cooker, she said that, once, when they were particularly overwhelmed by the work ahead of them, she asked her husband if maybe they should just quit, give up. No, he said, this is what we can do to make this village a better place.

One of Mitaw's young helpers came back into the kitchen trailing a giant waxy banana leaf. The girl split the leaf along

its central rib and lined a large woven bamboo serving tray. Then Mitaw loaded the tray with piles of mint, plates of food and bowls of hot peppers, and several of the young men arrived to carry the laden trays.

"I care for these children; I feel like I'm connected

to them," Mitaw said, as the food left the kitchen. "If I stop, I can't imagine where they would go."

FACE FORWARD

Theerawat used his position as village leader to transform a village, and now he and his wife have turned their home into a training center to ensure the next generation continues on this path. Their work in Baan Saen Suk has received notice. In 2003, Theerawat received Heifer's Golden Talent Award, which recognizes outstanding project participants who serve their communities; he was awarded the Green World Award, which recognizes one person in each province for environmental work; and he was even singled out by the prime minister for an award.

But they don't do it for the recognition. Something deeper, more personal drives them. For Theerawat, memories of a difficult childhood and the burden of

poverty are never far away.

"I used to be very poor when I was young," he said. Twenty years ago Theerawat earned 8 baht a day as a day laborer, with which he had to support his entire family, leaving him only 2 baht a week for food. But he found a way out, with Heifer's help, and now he earns about 60,000 baht a year (about \$1,800) from selling animals and fruit.

"Now that my life has improved and I have more opportunities, I would like to extend that to others." And so most of that income, he said, goes straight back into the learning center. "I want to encourage other people to improve their lives, like me."

And what of the water buffalo Theerawat dreamed of as a young boy? In 1993, he received six of them from Heifer. He now has 14, including the first one he received more than 15 years ago. He has been passing on his livestock and knowledge ever since.



Theerawat with his 8-year-old son, Theerapat, atop a water buffalo.

PHOTOGRAPHER'S NOTEBOOK

Down but Not Out in Northern Thailand

By Russell Powell, World Ark contributor

My fever crept in last night. I tried to will it away. It's nothing, I told myself. I'm just tired. I'm not getting sick, not here. I can beat this.

But now, lying on a concrete floor in a remote village in northern Thailand, using my shoe as a pillow, my body tells me I have lost.

Earlier this morning, on the outskirts of the provincial capital of Chiang Rai, where a giant statue of Buddha overlooks a serene river, I awoke with a temple-pounding headache. Dragging

myself into the backseat of Heifer Thailand's suv, I spent the next few hours prostrate as the vehicle strained to climb switchbacks and overtake slower motorists. I occasionally lifted my head to glimpse sharp mountains cloaked in dense vegetation before lying down again.

By mid-morning, we arrived in the village of Klon Mai, less than a mile from the Burma border in an area known as the Golden Triangle. We came here to talk to Heifer project partners. The cool, shady interior of the modest concrete home of Lipo and Nachi Lahuna was a welcome reprieve from the inescapable tropical heat. The main room was barren apart



from a calendar and a photograph of King Bhumibo Adulyadej, the current monarch of Thailand.

With the call for lunch, everyone else moved into the kitchen, but I laid down, the concrete cool to my body. I have noticed a common quality about the homes of Heifer participants: floors—wooden, concrete, even dirt floors—are always swept clean. The Lahuna home is no exception, and I am getting an up-close inspection.

I must have drifted off. When I wake up, I feel a breeze and un-

cover my face to see that someone has placed a fan near me. Next to the fan sits a pillow.

An isolated village a day's drive from the nearest hospital and literally around the world from my own family is a formidable place to fall ill. But someone is looking after me.

My job, although strenuous at times, is made easier by the families I photograph. They are always willing to open their lives and share their stories with me, a perfect stranger. Even thousands of miles from home, I know I'll find hospitality and generosity—in the form of a meal, shelter from the heat, or simply a well-placed pillow.

Russell Powell is a freelance photographer who lives in Little Rock, Ark. He has traveled to Tanzania, Mexico, the Philippines, Thailand and Armenia for Heifer International. He recovered quickly from his fever upon his return home. He will meet and photograph more Heifer families in Guatemala this summer for World Ark.





(Top) Anna Fong tries to balance a load on her head during a 2009 Heifer Study Tour to Nepal. (Bottom left) Heifer Study Tour participants ride a "Jeepney" in the Philippines in 2010. (Bottom right) Linda Rosenbury meets a Tanzanian boy during a 2006 Heifer Study Tour.

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for Good

Options for learning- and service-based travel are multiplying, and proponents say visiting the people you wish to help creates bonds that can't be replicated. If you choose your trip wisely and prepare yourself well, you're sure to get more out of it than you give.

By Lauren Wilcox WORLD ARK CONTRIBUTOR

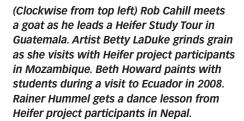
WHEN ALICE SCHRADE, a retired social worker from Delmar, N.Y., traveled to Guatemala with a Heifer Study Tour in 2009, she knew what she was looking for. Schrade had visited Guatemala before to work with indigenous people affected by the country's civil war, and she felt drawn to return. A Heifer supporter for several years, she chose a Heifer Study Tour because she "really wanted to see where my money was being spent, how my money was being spent."

During her two weeks in Guatemala, she and other Study Tour participants spent a night with a family who spoke only the local dialect, but the visitors spent the evening playing with the children, drawing pictures and teaching each other numbers and letters.











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The tour group also visited Mayan community members who were violently driven out of the country. They returned when the war was over. "They had painted their story on the side of their school building in poster-paint colors," Schrade recalled. "It showed them being gunned down by the army ... it showed them leaving in a group, all the people in their bright colors, and then ... rebuilding their community."

The village's rebirth, in a country that has seen great hardship, was for Schrade vivid, firsthand evidence of a people's determination and resilience. She came home with a renewed commitment to promote peace and greater respect for the Guatemalan people.

Trips like Schrade's can be life-changing, an extraordinary glimpse into a world that one might otherwise never see. Travelers can choose among hundreds of these educational experiences that set out to dozens of countries around the world. Experiences range from in-depth looks at development work to hands-on building blitzes to outfit communities with houses, clinics and water systems.



For those who want to become more engaged in hunger and poverty work, educational travel can be an invaluable tool. "Nothing beats face-to-face interaction if you want to learn about an issue, a community or an organization," said Nancy McGehee, a sociologist at Virginia Tech who studies volunteer tourism. "All the Web surfing, social networking and YouTube videos in the world cannot come close to the actual person-to-person experience."

But all education travel and "voluntourism" opportunities are not right for all travelers. Determining how a visit is run, identifying your own goals for the trip and having an idea of what you can expect are all essential to ensure that the experience is a positive one—for the people and the places you are visiting, as well as for you.

WHEN FAR AWAY, LOCAL IS BEST

Voluntourism and education travel differ from ordinary travel in critical ways. Very often, these are visits to vulnerable areas that lack the infrastructure necessary to support mass tourism. If such trips are not carefully designed and carried out, they can overwhelm local resources, take advantage of communities and create a dependency on outside help.

Whether the goal is to help dig a well in a Ugandan village or to learn more about a sheep-breeding project on an American Indian reservation, the most important characteristic of a project that receives visitors is that it has strong involvement at the local level and is initiated and led by the people who will benefit from it. This is a hallmark of good development work, and it becomes doubly important as a project opens its doors to visitors or volunteers.

Linda Stuart, founder of Global Citizens Network, gave the example of the volunteer who, when visiting a village with a slow-moving building project, said, "Let's get a bull-dozer and get this done!" Visitors may think they know best, but Stuart said the clinic is far more likely to be a successful and valuable addition to the community when locals are primarily responsible for its construction. This approach also reduces the risk of a community becoming dependent on outside help, "quick fixes," or donations for what it needs.

HANDS ON OR HANDS OFF?

Depending on the organization, trips may or may not have a hands-on component. If a trip does include volunteer work, visitors generally help community members with a

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(Clockwise from top left) Carole Adornetto and Mona Dixon read by flashlight with a boy in Thailand during a Heifer Study Tour. Irene Bender (left) and Lewis and Karen Atkinson try on masks during a Heifer Study Tour to Ecuador. Teachers pile into the back of a pickup during the Heifer Study Tour for Educators in Honduras.

project, like the house-building efforts of Habitat for Humanity, or help to staff a local service organization, like a medical clinic.

Trips without a volunteer component focus more on learning about an organization's work, as well as learning about hunger and poverty and related issues. Heifer's Study Tours, for example, do not currently include volunteer work; this is because in Heifer's projects participants are developing self-reliance and sustainability by doing most of the work themselves.

This is not to say that there is not a service component to trips like these. As Katherine Lu, director of Heifer's Study Tours program, explained, "For our Study Tour participants, the real service work of the trip comes after participants return home and begin to make changes in their own lives based on what they have seen and learned"—a task, she added, that is just as challenging as any hands-on volunteer work.



LOGISTICS

It's important to consider how the trip is organized and run. At the outset, look for an application process; any organization worth its salt screens its applicants, McGehee said. Although this may sound intimidating, it is in everyone's best interest. It helps trip planners gauge the expectations and physical and mental fitness of participants, and match them with appropriate programs. And as Mary Albright, project coordinator at the Minnesota-based development organization Give Us Wings, pointed out, it also helps prospective travelers think through some of the issues surrounding such trips, such as the cultural differences, the physical effort required and the potentially spartan living conditions.

Training or other formal preparation for the trip is also useful, both before and during travel. Some organizations, like the Vancouver, Canada-based Hope International Development Agency, offer travelers brief sessions on poverty, development and service, as well as information on culture and development in the destination country. Rainbow Choi at Hope International said these sessions pose discussion questions such as why, with the amount of money being spent on international development, people are still poor. The questions are difficult, but "there's no right or wrong answer," she said; they are simply to get people thinking about the issues.

Finally, look for a trip that fosters a connection between the community and the visitors with scheduled "quality time," where the only emphasis is on getting to know each other. This can include staying a night with a local family, an experience many travelers say is the most memorable part of their trip. But it may also include unstructured time spent

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Lasting Impressions

simply interacting, or as Albright of Give Us Wings said, "building in the space where we don't know what is going to happen." On one of their trips, she said, a woman who had taken some knitting to work on ended up teaching several of the women in the village to knit; on another, a woman who practiced yoga held a yoga class to help women with the pain they suffered from the hard labor of their daily tasks.

MAKING CONNECTIONS

Ultimately, the goal of a successful trip is to create an exchange, an experience from which both visitors and locals will learn and benefit, Lu said. This happened many times for Schrade on her trip to Guatemala. She described how, during her overnight stay in a village, she showed a postcard of one of the state Capitol buildings in Albany, N.Y., to the father in the family. "He asked me if it was my house," she said. She hastened to explain to him that her house was nothing like the Capitol building, but the incident made her realize how much they all could learn from each other.

Lauren Wilcox is a freelance journalist based in Jersey City, N.J. Her work has appeared in World Ark, Smithsonian and The Washington Post Magazine.

Painting a school: Read Wilcox's account of her church group's visit to Cuba at www.heifer.org/ worldark.

Heifer Study Tours

Heifer leads a number of scheduled Study Tours each year that are open to the public. Also available are a limited number of special group Study Tours, designed for groups who want to travel together, such as church groups or community organizations. For more information visit www.heifer.org/studytours.

Travelers who devote their vacation days to education and service bring home a lot more than souvenirs. Their memories and renewed dedication to a cause can last a lifetime.

Ruth Pallow and Amy Winkel of Roseville, Minn., who traveled to Uganda and Kenya with a development organization called Give Us Wings, found themselves immersed in the daily struggles of the people they were visiting and working with. "I stayed with a woman all day who walked on her hands and knees because she had polio," Pallow said, "so I helped her with her field work ... and helped her make dinner."

"You know there are people who live in horrendous poverty situations," said Winkel, "but ... until you go there, and you smell what it smells like, and you feel what it feels like, and you understand when there's no clean water—it takes on a whole different significance."

Heifer Study Tour traveler Kevin Fishner came away from his 2006 visit to Tanzania similarly transformed. This was his first trip to a developing country, and he didn't know what to expect. "I wasn't sure how we would be treated as tourists," he said, "if we would be viewed as welcome guests or ignorant intruders."



Kevin Fishner makes new friends in Tanzania.

The encounter that made up his mind was a chance meeting as Study Tour participants chatted with a group of townspeople during a stopover in a small town. A young man named Joseph struck up a conversation with Kevin by joking with him, inviting him to dance in his tribe's traditional dress. Kevin was surprised at how easily he and Joseph fell into conversation, first about soccer, then about hip-hop musicians they both listened to.

Looking back on the trip today, Kevin recalls several moments that really made an impression on him, like the lavish meal of baked fish and fresh fruit villagers prepared for his group, while the villagers themselves ate a simple meal of porridge. And he was struck by how a family will immediately "start to give back to everyone else" as soon as they have anything of value to share. "I think that is something that Americans don't really appreciate," he said, "the fact that [Americans] are more out for themselves all the way through."

Kevin is now a sophomore at Duke University, and his travels with Heifer four years ago continue to shape his thinking about work and study. He recently declared a double major in public policy and philosophy. He said he is most interested in working on international policy at it relates to foreign aid and development.



Nourish: Food + Community explores the provocative question: What's the story of your food? Narrated by Cameron Diaz, this film features interviews with Alice Waters, Jamie Oliver and other thought leaders. The following excerpt is from author Michael Pollan.

Vote With Your Fork

By Michael Pollan

ood is not just fuel. Food is about family; food is about community; food is about identity. And we nourish all those things when we eat well.

There is a lot of cultural wisdom in food. And indeed, that's how we knew what to eat for all this time. We didn't have scientists. We didn't have industry, you

know, hawking products at us. We had food culture.

Whether it's the Mediterranean diet or the French diet or the Indian diet—there are so many traditional diets around on which people live long, happy lives with very little chronic disease.

The one diet, so far, that we do not appear to be well-adapted to is the Western diet—the way most of us eat—this diet that includes lots of refined carbohydrates, lots of fat, lots of sugar. The diet that essentially has been invented over the last 50 or 75 years.

We know we're not well-adapted to it. Why? Because it's making us sick. Four out of the 10 leading killers are chronic diseases linked to food.

INDUSTRIAL FOOD SYSTEMS

If you're a food company, your goal is to sell as much food as possible. How do you do that? You've got to convince people to eat more food.

One way is giving us our calories in liquid form. When you're drinking soda, you can drink more with-



out getting full than if you were eating all that sugar in solid food form.

Since 1980, we are managing to pack away about 300 more calories per person per day than before 1980. And there's your obesity epidemic. And most of those calories—most—are full of high fructose corn

syrup. High fructose corn syrup is a sweetener made from corn.

You probably don't realize just how much high fructose corn syrup you eat in a day. But if you spend some time looking at the labels in the grocery store, you would find that all the sodas, many of the baked goods, the jellies, the pickles, the mustard, the ketchup and frozen foods—all sorts of foods have high fructose corn syrup. It's a tool of food scientists to induce us to eat more because you will always sell more of something if you make it a little sweeter.

One of the earmarks of the industrial food chain is keeping us stupid about our food choices, not giving us information. And, you know, the story of your food is very, very important, because it is the beginning of thoughtful eating.

CREATING A SUSTAINABLE FOOD SYSTEM

In your choices about food, you express what matters to you. There is organic. The label organic has shown



up in supermarkets all over the country now. And when you support organic, you're supporting food that's been grown without pesticides, without chemical fertilizers and usually with much more respect for the land.

There's also local food. The local food movement is one of the most exciting things going on in the food world today. We've seen an explosion of farmers markets, the fastest growing segment of the food marketplace.

If you're concerned about climate change, that's one reason to change the way you eat. Eat closer to home, and eat less processed food, and you will cut down on the carbon footprint of that food choice.

Good food tastes better. It is just such a rush of flavor. We have farmers now who are growing amazing peaches, amazing pears. The pleasure of eating these things is just something you don't want to miss.

Another way we can support sustainable agriculture is by talking with the people feeding us, asking questions like "Do you have an organic alternative? Can you get local carrots next time?"

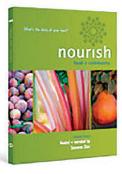
Our schools, our colleges have enormous buying power. When that world shifts even just a little bit, the ripples, all the way down to the level of the farm, will be immense.

VOTE WITH YOUR FORK

The wonderful thing about food is you get three votes a day. Every one of them has the potential to change the world. Now, it may seem a little daunting to think, "Oh my God, I've got to vote right three times a day." And you know, in fact, you don't and you won't. We all have our junk foods that we can't resist, and you know, that's

But if you get it right once a day, you can produce a more sustainable agriculture, a cleaner environment, diminish climate change and improve the lot of animals. That's an amazing power that we have, and we all have it. ■

Michael Pollan is an author, a contributing writer to The New York Times Magazine and a Knight Professor of Journalism at UC Berkeley. His most recent book is In Defense of Food: An Eater's Manifesto. Produced by WorldLink in partnership with Heifer International, the Nourish: Food + Community DVD and more information are available at www.goworldlink.org.



Food for Thought

REVIEW

Journey to Congo

By Austin Bailey, World Ark senior editor

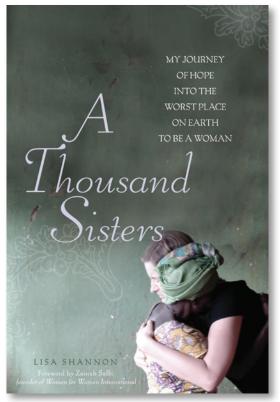
s it fair to decide you're going to love a book before you even crack it open? Maybe not, but A Thousand Sisters seemed promising. It's the story of a young woman from Portland, Ore., who abandons her perfect house, a successful business and a handsome fiancé with an English accent to help her unseen sisters in a country that's been dubbed "the worst place on Earth to be a woman."

A post-colonial morass of civil war and suffering, the Democratic Republic of Congo is an electric topic that doesn't get nearly enough airtime. Henry Morton Stanley, of "Dr. Livingstone, I presume" fame, boasted of conquering it with guns and whips in his 1878 Through the Dark Continent, and 20 years later riverboat captain-turned-author Joseph Conrad used it as a backdrop for exploring mankind's inherent evil in Heart of Darkness. Barbara Kingsolver took readers there with The Poisonwood Bible, which took place around the time of the Congo's independence from Belgium in 1960.

But few authors have had the guts to dig into the Congo of recent decades, as the country crumbled under a series of dangerous dictators and access went from inconvenient to dangerous to almost impossible. As Tim Butcher wrote in Blood River, a book about his 2004 death-wish quest to retrace Stanley's steps, only a skeleton crew of aid workers, peacekeepers and foreign journalists remain.

But the Congo's remoteness makes it more worthy of our attentions, not less so. Lisa Shannon is one of a handful of authors coming forward to tell stories about this resource-rich country that is so isolated, underdeveloped and violent.

The geography is certainly a draw, but it turns out Shannon's personal transformation is the starring story line in A Thousand Sisters. The book reads like Eat, Pray, Love if Elizabeth Gilbert had sought out rape victims and burned villages in the Congo instead of doe-eyed lotharios and ashrams in Italy and India. Both authors were at a similar crossroads at the onset of their journeys. Gilbert's marriage was



A Thousand Sisters: My Journey of Hope Into the Worst Place on Earth to Be a Woman By Lisa Shannon Seal Press, 2010, Hardcover, \$24.95

over; Shannon's engagement was off. Gilbert was chucking her life plan and drawing up a new map; the recent death of her father prompted Shannon to do the same.

Shannon too eats (mainly beans and peanuts), prays (for composure a few times), and even manages to inject romance into her Congo adventures. Just when the flood of stories about rape and murders in the Congo start to overwhelm, Shannon dashes off for a racy, recharging weekend in tony Zanzibar with an unnamed software tycoon she met on her hotel terrace. It's at this point that readers know A Thousand Sisters suffers a bit of an identity crisis. Is this a book about the suffering of women in the Congo, or a woman from Portland? If the point is really to inspire us to reach out and form sisterhoods that transcend geographic boundaries as the back-cover blurb suggests, then why does Shannon distract us with steamy soaks in a marble tub with the mysteriously named "D"?

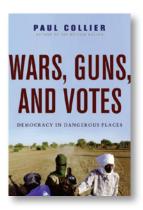
Maybe this is really just a book about Shannon, after

all. Fair enough. In this endeavor, A Thousand Sisters succeeds. What inspires a couch potato to sweat and bleed through 30-mile runs to raise money for women she's never met? How does someone make the leap from occasionally donating to a good cause to boarding a plane headed to one of the most dangerous countries on the planet so she can deliver aid firsthand? What magic ingredient transforms a normal gal into a humanitarian dynamo? The fact that Lisa Shannon's call to the Congo, her aha moment, came while she was watching Oprah only makes the story more accessible. Shannon was mildly depressed, directionless, tuning in for her daily dose of the queen of talk shows. And then suddenly Shannon is a running, fundraising, senatorlobbying superwoman, a feel-good diva in her own right. She founded Run for Congo Women, a grassroots nonprofit that has helped more than a thousand Congolese women. Sure, I'll pay \$24.95 for that.

This is a new kind of chick-lit, a paperback for women who daydream about being a hero rather than wooing one. Unfortunately, in *A Thousand Sisters*, Shannon's own story overshadows the voices of the women she meets in the Congo, the stories she set out to highlight.

To learn more about Shannon's work and Run for Congo Women, visit www.athousandsisters.com.

NEW AND NOTEWORTHY



Wars, Guns, and Votes: Democracy in Dangerous Places by Paul Collier Harper Perennial, February 2010 Softback, \$14.99

Economist Paul Collier challenges the notion that the spread of democracy is a panacea for violent and developing countries. He argues that unregulated elections may offer the appearance of democratic rule but often reinforce existing problems. He then goes on to offer his unique solution.



Pray the Devil Back to Hell www.praythedevilbacktohell.com DVD, 72 minutes

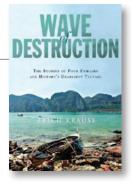
This award-winning documentary film tells the story of the women in Liberia who campaigned for peace and helped bring an end to that country's long civil war.

FIVE FAVORITES ON:

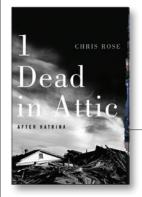
Natural Disasters

Natural disasters make for good news headlines but seem to fade quickly from our consciousness. Take some time to revisit and reflect on a few of the worst natural disasters in history.

Wave of Destruction: The Stories of Four Families and History's Deadliest Tsunami by Erich Krauss

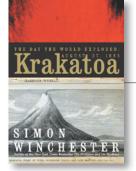


1 Dead in Attic: After Katrina by Chris Rose



Storm Warning: The Story of a Killer Tornado by Nancy Mathis

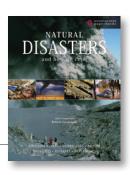




Krakatoa: The Day the World Exploded: August 27, 1883 by Simon Winchester

Natural Disasters and How We Cope

We Cope by Robert Coenraads



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News From the Field

Clear Waters

Improving the Environment in a Ukrainian Village



Project participants clear a spring near the pond. Once the spring is unclogged, it will again feed fresh water to the pond.

"I'M SORRY. There is no opportunity to support this project right now," said the Heifer Ukraine project officer on the other end of the phone. "We will need to search for other options."

The words began to sink in only after Olha Vyshniakova put down the receiver and made her way through the village of Trostianets. She had known it was a long shot—with the worsening economic situation in the country, the virtually paralyzed parliament, corruption at all levels. But what a setback! And yet, somehow, she still had hope.

Vyshniakova stopped, deep in thought, to let a herd of cows pass on their way home from the pasture. She watched them absently. Their heads were bowed, and their tails swatted the flies and mosquitoes swarming around them.

The cows were coming from the village pond—an unpleasant-looking body of water, its banks dry and sandy even now in spring. The banks were covered with animal dung from all the cattle and poultry watered there. When the heat of summer kicked in, it would be covered in algae blooms and develop a distinct and unpleasant odor. Vyshniakova sighed. She remembered being able to swim in the pond as a child, almost 30 years ago. People used to fish in the pond as well. Today the pond had become a hazard to everyone's health, a grim reminder of the worst kind of human impact on the landscape.



Cows once grazed on the banks of the pond, polluting the water and contributing to erosion.

Vyshniakova suddenly had an idea. She ran back and called the Heifer Ukraine office again. Short of breath and her heart beating fast, she said, "I know there is no opportunity to support a full project with cows, equipment and everything. I understand. But what if we do an environmental project instead?"

The project kicked off with a stringent water evaluation, and not surprisingly the pond was found to be severely environmentally degraded. Erosion had filled the pond, making it shallower. There was the problem of animal waste. It was concluded that more than 200 pounds of manure entered the water every day, which resulted in the unpleasant algae blooms that made the water unhealthy for people, cattle and wildlife.

Villagers were invited to attend several open seminars to discuss the environmental problems of the local pond and to seek possible solutions. Only after they were clear on what they were doing and why, did the real action begin. Villagers removed the garbage from the banks of the pond. They resettled the cattle to graze in a new area away from the pond, constructed fences so the animals stayed out and built new water tanks for the livestock.



Today, the area around the pond is a community gathering place, and the water is clean and clear.

Village activists like Vyshniakova and representatives from local NGOs were invited to attend a final conference. It was difficult for all parties to believe that only a year had passed, yet so much has been done to improve the quality of life in Trostianets—something every person, young and old, visitor and local, can enjoy and appreciate.

Reporting and writing by Anna Pidgorna, Heifer Ukraine program manager.

Celebrating a Dairy Project's Success

Ceremony in Tanzania highlights 11 years of Passing on the Gift

A MILK-DRINKING competition highlighted a recent Passing on the Gift ceremony in Nyumbanitu, a village in the southwestern highlands of Tanzania. All around were the everyday reminders of the positive effects of the Heifer International project—improved houses, healthy kids in school uniforms, men hauling milk to the nearby factory and women carrying organic vegetables to the market.

The project in Njombe District began in 1999, supplying 30 cows to three small groups. Today, the project has donated 515 dairy cows to 229 beneficiaries in 16 groups. During the ceremony, members of all 16 groups attested to the dairy project's success in ending hunger and poverty in the area.

"Economically, the project has been part and parcel in improving income and nutrition to our families. We have been able to get enough milk to drink and sell the surplus," said one of the participants, adding that the project also enabled many of the beneficiaries to install solar power or biogas, pay school fees for their children and purchase vehicles for transporting their farm products.

In addition to receiving dairy cows, project participants also trained in record keeping, entrepreneurship and organic farming. More than 80 percent of the beneficiaries now apply organic manure to their farms instead of chemical fertilizers, and today each family harvests about 12 bags of corn per acre.

"We are thanking Heifer for this project," said Eliabu Siha, who passed on a cow, "because it has brought peace, solidarity and love."

Reporting by Richard Bugaisa, Heifer Tanzania communications coordinator.

HEIFER SPIRIT

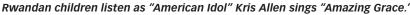
Giving Resources, Giving Self

"American Idol"

Kris Allen Rocks for Rwanda

By Austin Bailey, World Ark senior editor







merican Idol" Kris Allen may have perfect hair and a camera-ready smile, but he sure could use a pedicure. The hairy-toed celebrity shucked his shoes at Heifer Village this April to raise awareness about struggling families during the "One Day Without Shoes For Rwanda Barefoot Bash."

Allen wheeled into Little Rock after a weeklong trip to Rwanda, where he visited families working with Heifer International and the Little Rock-based non-profit Bridge2Rwanda. Allen also participated in a "shoe drop" for TOMS Shoes, putting shoes on the feet of children who would otherwise go without.

The audience at the Barefoot Bash checked their shoes at the door, then crowded in to watch Allen perform a three-song acoustic set and share videos from his trip. Allen peppered his performance with some heartfelt encouragement to his fans to reach out to Rwanda.

Allen and his fans ditched their shoes in solidarity with people in Rwanda who have no choice about being barefoot. "For me, this is comfortable, but I don't have to do this all the time," Allen said.

When Allen left the United States, his celebrity status didn't follow. The children he met in Rwanda didn't recognize him. "They didn't even want to hear me sing," he said. "They just wanted to play my guitar." But Allen didn't mind. A veteran of service trips to Haiti, Thailand and Mozambique, Allen said Rwanda was the most beautiful place he's ever visited.

"I can't wait to go back," he said. "When you go over there to help people, you always come back transformed." He wants to share the message that although Rwanda is still recovering from the 1994 genocide, it's a hopeful place with amazing potential.

During his trip Allen visited the Bridge2Rwandasupported Sonrise School, where half the 1,200-mem-

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Kris Allen performs an acoustic set at Heifer Village during the Barefoot Bash for Rwanda.



Allen reminisces about the people he met in Rwanda.

ber student body is made up of orphans. The school received a Heifer cow years ago, and that cow has since produced a small herd to provide the milk that keeps the students healthy.

"Putting milk in their diets adds enough protein to really make a difference in their lives," Allen said.

Sahr Lebbie, Heifer International's vice president of Africa programs, grew up in Sierra Leone. He remembers walking four miles to school every day without any shoes and was happy to see Kris Allen become an advocate for Rwanda. "Kris' presence in Rwanda is very meaningful for us," he said. "When he talks about it, people will listen."

Michaela Ortner was certainly listening. The 16-year-old from North Little Rock, Ark., was happy to go shoeless to hear Allen's message. "I think it's good to see celebrities use their influence over people in a positive way instead of a negative way," she said.

Giving Resources, Giving Self

Going the Extra 1,456 Miles

By Sherri Nelson, World Ark contributor

Then Lee Lyle, a public school teacher for 20 years, incorporated his experiences from a Heifer Study Tour to Honduras into his Spanish class curriculum, he immediately noticed something different. His students at Parkview High School in Little Rock, Ark., were listening. They asked questions. They did extra work.

"I wrote literature in Spanish for the students," Lyle said. "And by reading about the people I met—like in Choncó, a Mayan village of marginalized people and the problems they face, students learn more indepth about historic social discrimination against indigenous peoples, how they're marginalized and how land and resource distribution is a part of the haves and have nots."

The Spanish teacher marveled at the bee and livestock projects he visited in Honduras, and he was excited to share that knowledge with his students. "This

one family we visited had about 20 different crops. They had several different livestock. They used vermiculture and biogas stoves," Lyle said. "It was like a college course in economic development—all in a 1- or 2-acre compound."

Caiti Bemis, a high school junior and former student of Lyle's, said his style of teaching and the lessons on Heifer both had a tremendous influence on her life. "I really loved his class

because he talked exactly about the things I was interested in. I'm a human rights enthusiast, and I enjoyed our class discussions in Spanish about cultural issues and history. It wasn't, 'Write down this vocabulary six times'—I was actually learning stuff," Bemis said.

Lyle hopes his Heifer experiences will continue to inspire students. "Teens really have more compassion and motivation to help others than society generally



Top: Spanish teacher Lee Lyle talks with a Heifer project participant in Honduras.

Left: Lee Lyle shares souvenirs from his Honduras trip with student Caiti Bemis.



perceives them to have. They are quick to point out what is unjust in the world," he said. "If they can be taught to retain that compassion and creativity while gaining more knowledge of the

world, they can mature into the kinds of citizens who take the lead in bringing about positive social change, whether locally or globally."

Lyle can be proud that at least one of his students plans to dedicate her career to service. Bemis wants to study nonprofit management in college. "His lessons had a great effect on me," she explained. "I'm a lot more thankful for what I have."

For those you care about most, give to those who need the most care.





PEACE HONEY

Packaged by Heifer partner Savannah Bee Company, this honey provides a market for Heifer beekeeping participants in Honduras. NH0009 \$15





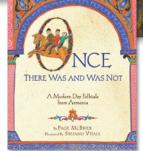
HEIFER HOPE BLEND COFFEE Sip this Fair Trade Certified™ organic coffee created by Green Mountain Coffee. 10 oz. NGHH04 Whole Bean \$8.49 NGHH14 Ground \$8.49





THE CHICKEN AND THE WORM

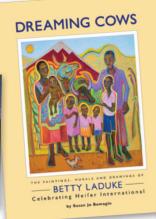
Introduces the idea that even the smallest creatures can work together to care for the Earth. Pre-K and K. Hardcover.



WINTER IN SONGMING

A coming of age story set in China. For 3rd and 4th grades. Hardcover.

NB07180HB \$16



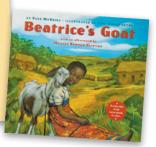
ONCE THERE WAS AND WAS NOT: A MODERN DAY FOLKTALE FROM ARMENIA

Based on a true story of three boys who joined a Heifer International-sponsored youth group. For 5th and 6th grades. Hardcover. NB07090HB \$16

DREAMING COWS

A look at artist Betty LaDuke's mural created for Heifer.

NB0814HB \$38 hardcover NB0815SB \$20 paperback



BEATRICE'S GOAT

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HOW CAN YOU PROVIDE FOR YOUR FAMILY'S FUTURE AND THE WORLD'S, ALL AT THE SAME TIME?







PLANNED CHARITABLE GIVING THROUGH HEIFER FOUNDATION.



Reduce or eliminate a variety of taxes, enjoy an income for life and establish financial stability for your family by contacting Heifer Foundation today. We will send you a free **Good That Grows** guide explaining all the financial options available. Heifer Foundation will then work closely with you and your trusted advisors to determine which plan is best suited for your individual needs and desires.



Summer 2010



Harvest Time

October 11-14 and 14-17, 2010

egister for Harvest Time, a three-night course on food systems, sustainable agriculture and self-reliance techniques, held at Overlook Farm in Rutland, Mass. Participants will deepen their knowledge of Heifer's work and the issues surrounding hunger and poverty. You will also learn small-scale farm techniques by harvesting crops, preserving food and learning how to raise chickens in your backyard. The \$325 tuition fee includes all programming, meals and shared lodging in Overlook's bunkhouse. Learn more at www.heifer.org/harvest or call (508) 886-2221.



Learning Center Group Programs

Learn how Heifer's gifts of livestock and training improve nutrition and income for millions of families around the world. (Pre-K and older) Locations: Heifer Ranch, Overlook

Farm, Howell Nature Center

HEIFER GLOBAL VILLAGE PROGRAMS

Heifer's Global Village programs give participants an unforgettable walk in the shoes of another to experience poverty, possibility and hope.

CULTURAL CONNECTIONS

Celebrate the culture of those helped by Heifer. While preparing and eating an authentic meal, enjoy traditional clothing, music, games and housing.

(4th-6th grades) Locations: Howell Nature Center, Shepherd's Spring

GLOBAL EXPLORERS

Explore the globe ecologically, culturally and geographically while investigating how everyday choices affect people and places thousands of miles away. (5th-6th grades) Location: Heifer Ranch

GLOBAL GATEWAY

Experience the daily struggles

that people in poverty face simply to feed their families. At Heifer Ranch, the Global Challenge program combines Global Gateway and the Heifer Challenge Course in one trip. (6th grade and older) Locations: Heifer Ranch, Overlook Farm, Howell Nature Center, Shepherd's Spring.

GLOBAL PASSPORT

This is the most challenging Heifer Global Village program. Spend two to three days and nights in the Global Village to gain a real understanding of the world's need for organizations like Heifer International. (9th grade and older)

Location: Heifer Ranch

SERVICE-LEARNING PROGRAMS

Service-learning programs combine experiential learning such as a Heifer Global Village program with service activities. The service projects allow participants to give back while also serving as great educational tools. Participants learn how to milk goats, harvest crops or perform other farm tasks. (6th grade and older) Locations: Heifer Ranch, Overlook Farm

Programs for Individuals

YOUTH PROGRAMS

Each year, Heifer Ranch offers programs for young people and their families. All programs require a minimum age of 12 and an accompanying adult chaperone per five youth.

♦ GLOBAL CHALLENGE

Program dates: June 18–21 Global Challenge combines the Global Gateway experience with team-building activities.

SUMMER ACTION

Program dates: July 11–16 and Aug. 8–13 Spend a week of your summer vacation learning how you can help Heifer end hunger and poverty while experiencing life on a working farm. The week includes Global Gateway, teambuilding exercises, service projects and more.

Location: Heifer Ranch

◆ GLOBAL GATEWAY

Program dates: Oct. 16–17
For one night, Global Gateway participants experience the daily struggles people in poverty face to feed their families a meager meal. Participants are given little to eat—just some rice, vegetables and eggs—and must find a way to build a fire to cook. The challenge continues into the night as they sleep in simple housing, such as a Zambian hut. Location: Heifer Ranch

◆ DAY CAMP

Looking for a meaningful way for your child to spend a week of summer vacation? Show children how to change the world by enrolling them in Day Camp. The program is packed with cultural experiences, farm chores and arts and crafts that explore hunger and poverty issues. The camp will nurture their desire to create significant change in the world. (1st–6th grades)

Location: Overlook Farm **Program dates**: July 12–16, 19–23, and 26–30; Aug. 2–6, 9–13, 16–20, and 23–27

LIVESTOCK HEALTH CARE WEEK

Receive hands-on experience on how to care for livestock as you assist us with our fall livestock health checks. (18 and older)

Location: Heifer Ranch Program Dates: October 3–7, 2010

RAISING BEES AND HARVESTING HONEY

Learn more about bees as you participate in our honey harvesting activities. (18 and older)

Location: Heifer Ranch
Program Dates: October 3–7, 2010

Public Events

In addition to these educational programs, our centers often plan special events. Contact your local center for more information.



Heifer University Programs

When you attend Heifer University you'll learn how to join the effort to end hunger and poverty. The three-day course will teach you more about Heifer and how to share Heifer's message and mission in your local community. You'll walk away knowing how you can make a difference in the lives of people around the world.

HEIFER U BASIC COURSE

Location: Heifer Ranch
Program Dates: September 23–25

HEIFER UNIVERSITY FOR COLLEGE STUDENTS*

Location: Heifer Ranch **Program dates:** October 28–31

Program Cost: \$225/person (This includes all meals, lodging, program fees. Transportation to and from the Little Rock airport is provided for courses at Heifer Ranch)

* Scholarships available. Apply online at www.heifer.org/heiferu.

For information, e-mail heiferu@ heifer.org or call Sandi Aung at (501) 907-2866.

Heifer Global Village Sponsors

HOWELL NATURE CENTER

Howell, Mich. - (517) 546-0249 hcnc@howellnaturecenter.org www.howellnaturecenter.org

SHEPHERD'S SPRING

Sharpsburg, Md. - (301) 223-8193 shepherds.spring@juno.com www.shepherdsspring.org

Study Tours

AFRICA

Tanzania: July 23-August 1 **Zimbabwe:** May 2011

AMERICAS

Peru: September 12–21 Bolivia: November 8–17 Honduras: November 20–26 USA: Louisiana: March 13-19, 2011 Honduras: March 13-20, 2011 Canada: June 5-11, 2011

ASIA/SOUTH PACIFIC

India: November 7–16
Vietnam/Cambodia: December

Indonesia: January 10-20, 2011 Thailand: February 5-15, 2011

CENTRAL/EASTERN EUROPE

Romania/Moldova: September 2–13

Poland: October 1–10 **Kosovo/Albania:** May 10-20, 2011 **Lithuania:** June 16-25, 2011

For more information, e-mail studytours@heifer.org or call (800) 422-1311.

Learning Centers Contact Information

HEIFER RANCH

Perryville, Ark. - (501) 889-5124 ranchevents@heifer.org www.heifer.org/ranch

OVERLOOK FARM

Rutland, Mass. - (508) 886-2221 overlook.farm@heifer.org www.heifer.org/overlook

HIDDEN VILLA

Los Altos Hills, Calif. - (650) 948-1621 hidden.villa@heifer.org www.heifer.org/hiddenvilla

FIRST PERSON

Learning the Cornerstones



"Mr. Theerawat introduced me to Heifer and the 12 Cornerstones. I hope Sharing and Caring will be the principles of the community."

— BUYUM PANASAENSUKJA

Buyum Panasaensukja, 33, received chickens and pigs from a Heifer project in her village of Baan Saen Suk, Thailand. The transformation of this once-depressed village is largely thanks to one man—Theerawat Pitakpraisri, a former village leader and now Heifer community facilitator. Read more about Theerawat and Heifer's work in Baan Saen Suk on Page 20.

Photo by Russell Powell

COME WORK ON OUR FARMS

hen you register for a Heifer International Agricultural Workshop at either Heifer Ranch in Perryville, Ark., or Overlook Farm in Rutland, Mass., you'll gain sustainable farming skills while learning more about Heifer's work.

Heifer Ranch Programs

Raising Bees and Harvesting Honey or Livestock Health Care Oct. 3-7, 2010

Overlook Farm Programs

Harvest Time

Oct. 11-14 or 14-17, 2010

These workshops are recommended for beginning to intermediate level farmers or hobbyists. Tuition fees apply and include programming, lodging and meals.





Learn more at www.heifer.org/farmprograms

To register e-mail Heifer Ranch at ranchevents@heifer.org or call (501) 889-5124.

At Overlook Farm e-mail overlook.farm@heifer.org or call (508) 886-2221.





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IT DOESN'T TAKE MUCH TO BE A FRIEND.



Friends of Heifer are dedicated and compassionate people who agree to give as little as \$10 a month to help support Heifer's work with families in need around the world. This steady, reliable stream of support can supply life-sustaining food and income to families who are struggling to break the cycle of poverty and hunger. As a Friend of Heifer, you will receive special monthly reports on how your commitment to end hunger and poverty is touching the lives of children and families.

To become a Friend of Heifer, call (888) 5-HUNGER or (888) 548-6437 or visit www.heifer.org/monthly

