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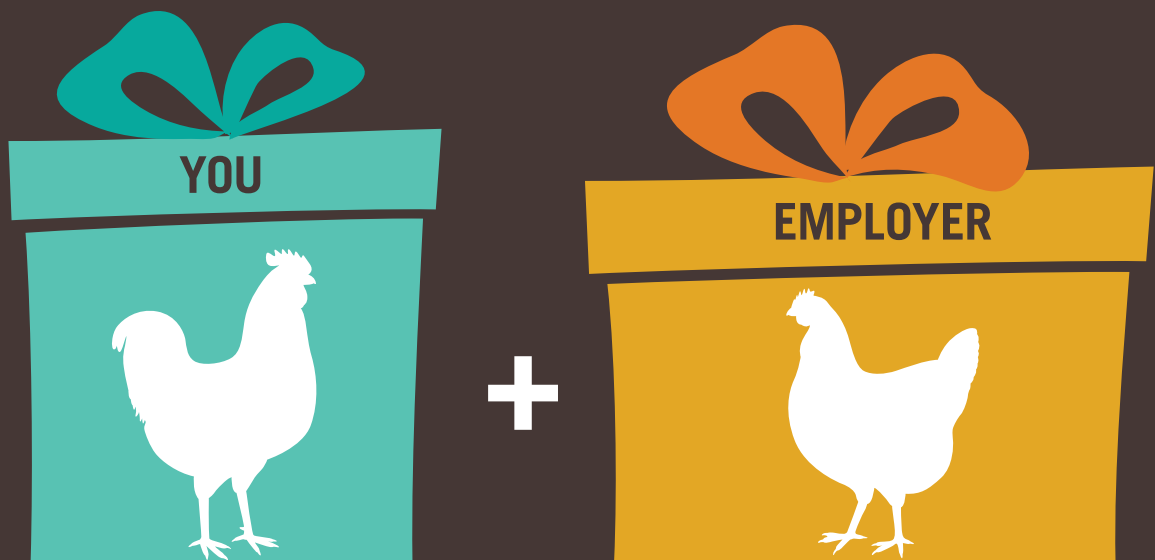
PLUS

FOR THE RECORD

What happens to your body when you don't have enough food? When you have too much?


HEIFER[®]
INTERNATIONAL

YOUR GIFT CAN BE TWICE AS NICE



Are you giving a Heifer gift? More than 16,000 companies across the country match employees' donations to Heifer, even if the gifts were made as long as a year ago. Many even match retiree gifts.

All you have to do is go to **www.heifer.org/matching** and type in your company's name. If you find your employer, just follow the instructions, and your contribution to end hunger and poverty will have double the impact. You can also call **888.5HUNGER (888.548.6437)**.





Dear Fellow Activists,

I've been talking and thinking a lot about The Gap, by which I usually mean the gap between the income the farmers with whom we work typically earn and the income they need to thrive and be self-reliant. But now I want to talk about a different gap.

It's the gap our founder, Dan West, first had in mind when he realized hungry families needed a cow, not just milk rations: the nutrition gap.

Nutrition is a key component of poverty alleviation because diet directly and significantly affects human cognitive and physical development. In the countries where Heifer International works, many of the nutritional diseases and limitations are primarily caused by a lack of access to affordable and sustainable food sources to meet nutritional needs.

While fruits, starches and vegetables are the foundation for healthy diets, many people in the communities where we work face nutritional deficiencies most readily met by animal-source foods. Eggs, meat and milk help provide sufficient calories, fat and protein, as well as important micronutrients such as vitamin B12, calcium, iron, riboflavin and zinc.

When most of us think of being hungry, we think of the hunger pangs we get when we skip a meal. For the families with whom we work, hunger is a deeper, more pervasive problem. It comes with afflictions like blindness, rickets, anemia, neuromuscular deficits, and impaired cognitive and physical development.

Studies evaluating the effects of adding animal-source foods into children's diets found that meat, eggs and milk can make significant improvements in health. Heifer International plays a clear and significant role



Pierre Ferrari participates in a Passing on the Gift ceremony in Bharatpur, Nepal.

PHOTO BY GEOFF OLIVER BUGBEE

in preventing and correcting many micronutrient deficiency disorders. Gifts of livestock can introduce new sources of food that address both macro- and micronutrient deficiencies, closing the nutrition gap.

And because of your support, and the support of others, we are capable of delivering these livestock with training in how to best manage these precious assets to millions of people in the developing world.

Thank you for continuing to help us empower small-scale farmers to close both their nutritional and income gaps.

Yours for a better world,

Pierre U. Ferrari

EGGS



Studies show that the nutrient choline, which is found in eggs, contributes to healthy brain function and reduces birth defects. One large chicken egg also contains selenium, B vitamins and more than six grams of protein!

MILK



Converting milk into products such as cheese, curds and yogurt reduces the levels of lactose, allowing more people to reap the nutritional benefits of dairy.

MEAT



Vitamin B12 is naturally found in animal products, including meat. It does not occur naturally in plant foods. B12 deficiency, which can lead to blindness, deafness and dementia, among other afflictions, is a severe problem in many of the countries where Heifer works.

SPEND THE NIGHT IN HEIFER'S GLOBAL VILLAGE

Challenge your group to spend up to five nights in one of our global villages at Heifer Farm in Rutland, Massachusetts, Heifer Ranch in Perryville, Arkansas, Shepherd's Spring in Sharpsburg, Maryland, or Howell Nature Center in Howell, Michigan, this summer. Heifer Global Villages simulate living conditions and challenges that our project participant families face on a daily basis. These immersive experiences serve as an education like no other on the issues surrounding hunger and poverty, and groups inevitably learn a lot about each other, too.



If you want to challenge and inspire your group,
learn more or book your summer overnight trip today:

WWW.HEIFER.ORG/VISIT | RESERVATIONS@HEIFER.ORG
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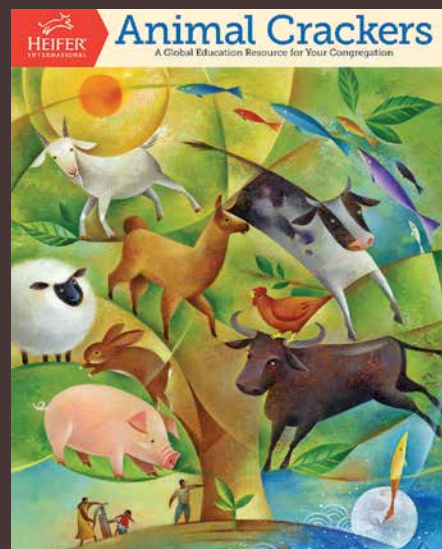


MAKE SUMMER MEANINGFUL

Education doesn't end when summer starts. Through simple Sunday School lessons, Animal Crackers is designed to help students feel connected to the global family. It's perfect for Vacation Bible School or any time of year.

Visit www.heifer.org/faith or call **888.5HUNGER (888.548.6437)** to order free resources like Animal Crackers, Feeding 5,000, Fill the Ark, Living Gift Market and information on alternative mission trips.

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COVER

Children on their way home from school stop at a tap in Tranquille, a drought-stricken village in the Haitian highlands.

Top photo: A new water tap is bringing life back to Baie de Henne in Haiti, where lack of water was thwarting efforts to grow food and raise livestock.

Cover and top photo by Lacey West

15 Heifer Ranch Alumni Spread the Sweetness
The young adults who cut their teeth as volunteers at Arkansas' Heifer Ranch retain their commitment to sustainability and service long after they leave.



20 Just Add Water
Heifer redoubled its commitment to projects in Haiti after the 2010 earthquake, but found that the struggling nation's unique atmosphere called for unique solutions. The first step is finding ways to provide clean water so that crops and livestock can thrive.



36 Wrangling Heifer's History
The rough-and-tumble romance of Heifer's seagoing cowboys wooed historian Peggy Reiff Miller. Here, she explains why she works so hard to make sure the stories from Heifer International's earliest days are never lost.





RECIPES FOR SUSTAINABILITY

I see you have in your gift catalog a biogas stove for \$50. There is a much better alternative that fits your values perfectly—solar cookers. Solar cookers require no fuel to be gathered so do not contribute to deforestation, and there is no expense to operate. They emit no dangerous burning byproducts, so do not contribute to health problems or global warming at all. Please see solarcookers.org for more information.

JOAN CHRISTENSEN
International Falls, Minn.

Editor's Note: *Heifer works with participants to offer sustainable cooking options that are culturally and environmentally appropriate. In addition to biogas stoves, Heifer helps families tap the power of biogas, heat-retention cookers and other devices for cooking. Heifer embraces solar energy and uses solar panels and showers in some projects.*

KEEPING TRADITION ALIVE

I'm retired now, but as a women's studies and history teacher, I always posted Heifer pictures and information on my board before each holiday. I explained to students that it was part of my holiday tradition to give a Heifer gift. It generated great discussions about how women's status and children's education can improve

around the world. One club even took it on and raised enough money to buy a sheep for Navajo women.

One day a mom walked up to me and said, "I never thought I would say this sentence, but when I asked my daughter what she wanted for Christmas, she said a goat! And that's what she got, of course."

I also leave my *World Ark* behind when I leave my dentist or doctor's office!

Paying it forward,

LANI SARACHILD
Redondo Beach, Calif.



In our previous issue of *World Ark* we asked readers, "If you could add any animal to our gift catalog, which animal would you add?" Here are a few of our favorite answers.

If I could add any animal to your gift catalog, it would be crickets or frogs. I realize this is unappealing to many of your catalog donors, but we just need to get over ourselves and realize that protein is protein. Learning how to mass produce crickets or frogs and harvest them in a sustainable and safe manner could be worthwhile.

LISA TOKACH, DVM
Abilene, Kansas

Ideas from our Facebook friends OSTRICHES

Ostrich eggs are huge and can feed two or three people.

MICHAEL AND RITA GIRDLER

QUAIL

My daughter went to Myanmar, and quail eggs were widely available. They produce prodigiously for such small birds and require little space to raise. Feed is not expensive, either.

CAROL THON GEIGER

PUPPIES

Because they teach kindness to children and can protect all those gift sheep!

ELIZA CAMP

TURKEYS

I would add turkeys to the gift catalog. My family has raised turkeys in South Carolina for more than 60 years. They can provide meat, fertilizer and feathers.

LANE MCLOUD

We want to hear from you!

Please send your comments to worldark@list.heifer.org. Include your name, city, and a telephone number or email 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.

Q&A SPRING

Do you volunteer your time and efforts for a good cause?

If so, what does the experience mean to you?



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Since 1944, Heifer has helped 25 million families, directly and indirectly, 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

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HUNGER



Getting enough to eat is a struggle **795 million** people face every day.



BRAIN

The body keeps the brain running by **breaking down muscle tissue into ketones.**

KETONES are the only substance besides glucose the brain can use.



MIND

**APATHY DEPRESSION
BAD TEMPER HYPOCHONDRIA
INSOMNIA**

EYES



Vitamin A deficiencies cause **impaired vision and cataracts.**

MOUTH & THROAT

Throat muscles weaken and **the voice becomes hoarse.**



Gums bleed, teeth decay.

Ketone production causes a person's **breath to smell like nail polish.**



HEARING & SMELL



These senses are sometimes heightened, at least in the initial stages of starvation.

CIRCULATORY SYSTEM



A shrunken heart has to work harder to pump blood and is susceptible to a **heart attack or cardiac arrhythmia.**

DIGESTIVE SYSTEM

Intestinal walls shrink to conserve energy, and become **more susceptible to invading bacteria.**

Eventually, the **digestive system shuts down altogether.**



INTERNAL ORGANS

All organs besides the brain **shrink to as little as half their original size.**

Toxins accumulate in the kidneys, and the liver fails.



SKIN

The skin can no longer **ward off infections.**



IMMUNE SYSTEM



Vitamin and mineral deficiencies increase the **risk of disease and death.**

MUSCLES

The body **sacrifices muscle tissue** to fuel the brain.



EXTREMITIES

Nerves in the hands and feet break down without sufficient vitamin E.

WITHOUT ENOUGH FOOD



Blood pressure falls, **causing fainting, falling and blackouts.**



Sensitivity to cold increases.



Motor skills are diminished, causing people to become **slower and clumsier.**

A PERSON CAN DIE OF STARVATION IN

as little as
3
WEEKS

as long as
70
DAYS



OBESITY

More than **600 million** people meet the World Health Organization's standard for obesity, which puts them at risk for some surprising complications.

EYES

Pulmonary problems caused by obesity affect blood vessels in the eye, causing **sight to deteriorate**.



MIND

CLINICAL DEPRESSION
ANXIETY **OTHER MENTAL DISORDERS**

BRAIN

INFLAMMATION subtly **diminishes memory** and other cognitive abilities.



NECK & THROAT



Excess neck fat puts pressure on nerves, contributing to **headaches and neck pain**.

More fat around the neck can also close off airways when a person is lying down, causing **momentary stops in breathing** when asleep.

? A condition known as **sleep apnea**.

INTERNAL ORGANS

Obesity raises the risk of **cancer and other diseases** in the:



COLON



LIVER & GALLBLADDER



KIDNEYS

SKIN

Hormone changes can cause the skin to **thicken and darken**. Swelling and stretching cause **irritation**.

JOINTS

More weight means more **strain on the body's joints and lower back**.

This can lead to **osteoarthritis**, a breakdown of cartilage and bone in a joint.



EXTREMITIES

Feet become **chronically sore** from carrying extra weight.

CIRCULATORY SYSTEM

Accumulation of fat hardens arteries, leaving a narrower space for the passage of blood.

Reduced blood flow to the heart can cause a heart attack.

? **Narrowed arteries can also cause blood clots, which might lead to a stroke.**



Blood pressure rises.



DIGESTIVE SYSTEM

Excess abdominal fat **puts pressure** on the muscle at the bottom of the esophagus.

This pressure allows stomach acid to flow up from the stomach, causing **acid reflux**.



IMMUNE SYSTEM

Obesity can cause **dysfunction in immune system responses**.





Spring Sweetness! Strawberries

By Elizabeth Joseph, garden and education coordinator at Heifer Farm

There are some telltale signs of spring at Heifer Farm—the lambs playing in the barns, the smell of maple syrup wafting from the Sugar House and spring flowers emerging from the ground. In the garden, garlic tops, asparagus stalks and overwintered parsnips poke through the mulch to reach the sunlight.

The greening and new growth of strawberry vines also takes place and is one of the best parts of this spring transformation, with the promise of sweet, juicy berries just around the corner, or garden row, as it were. Best of all? Strawberries are perennials, so they'll come back each spring without much effort. Here are some tips for growing strawberries in your garden, in a container, or wherever you find a bit of earth this spring!

Strawberries (*Fragaria ananassa*) are semi-hardy plants that require **full sun**. There are many cultivars, or varieties, to choose from. Factors to consider include climate, flavor, firmness, how you'll use the berries (eating fresh, jam, freezing and so on), disease resistance and ripening habits. June-bearing types flower in the spring, while ever-bearing or day-neutral strawberries fruit multiple times in a season. Local seed companies or nurseries are helpful resources when picking out varieties.

For the best strawberries—as with all fruits, veggies, herbs, trees, you name it—it's essential to **build soil fertility** before planting to maximize

plant health and produce a more robust, flavorful and nutrient-rich crop. You can take a soil test and amend for mineral deficiencies, build soil structure through compost and bed preparation, and put down mulch to feed and encourage soil biology (the earthworms, bacteria and fungi) that are integral for plants to grow.

Mulching also helps with weed control, which is important because once the plant sends out runners from the main plant, it is difficult to weed with any tools. Place a thick layer of organic matter—weed-free compost, shredded leaves, hay, straw—and when it's time to plant, keep the majority of the mulch in place and simply push some aside where the plant is going.

At Heifer Farm in Rutland, Massachusetts, we plant strawberries in raised beds in May. Recommended spacing is 18-24 inches apart in rows 4 feet apart. Most strawberry plants come in the form of bare root stock, and it is important to plant the crown level with the ground.

You can help the plant get established by keeping the soil mulched and moist, and by pinching any flowers that bloom during the first year of growth. Trim runners if they spread into the walking paths to allow for good ventilation to prevent pests and mold. Another simple (and delicious) tip to maintain a healthy strawberry patch is to be thorough when harvesting, and not let any spoil



PHOTOS BY ELIZABETH JOSEPH



in the patch. If you live in an area with a freeze/thaw cycle, then mulch over the plants with straw in the fall (one theory as to how strawberries got their name) to prevent winter damage.

Strawberries are perennial, so you can enjoy these sweet treats each year so long as pests, weeds and diseases are kept at bay. After the third year yields drop, so think ahead and plant new strawberries each year to ensure there are always strawberries on the way come springtime. Happy growing!



PHOTO BY ELIZABETH JOSEPH

Strawberry Granita

Yield: about 6 cups

Ingredients:

- 1 cup hot water
- 3/4 cup sugar
- 2 tablespoons lemon juice
- 3 cups sliced, hulled strawberries (from 1 pound whole berries), plus additional berries for garnish

PREPARATION

Stir first three ingredients in small bowl until sugar dissolves. Blend sliced strawberries in blender or food processor until smooth. Add sugar syrup and blend until combined.

Pour mixture into 9-by-13-inch nonstick metal baking pan. Freeze until icy around the edges, about 25 minutes. Using a fork, stir the icy portions into the middle of the pan. Freeze until mixture is thoroughly frozen, stirring edges into center every 20 to 30 minutes, over one to two hours. Using a fork, scrape granita into flaky crystals. Cover tightly and freeze. (Can be made one day ahead. Keep frozen.) Scrape granita into bowls. Garnish with berries and serve.

Tips for Water-Wise Gardening

By Molly Fincher



MULCH

Help your soil retain as much moisture as possible with mulch. Use grass clippings, leaves, bark, compost, or even cardboard and newspaper. Mulch offers the added benefits of improving soil quality and fending off weeds.



DITCH THE SPRINKLER

With sprinklers, quite a bit of water is lost to evaporation or sprinkled onto things that don't want it, like sidewalks or innocent passers-by. Watering by hand or laying down soaker hoses will reduce water waste.



CHOOSE DROUGHT-RESISTANT VARIETIES

You don't have to go full-on cactus garden to save water. Try lavender, golden poppies, yarrow, purple coneflower or tall bearded irises. For an aromatic herb garden, try planting sage, rosemary and thyme—you should probably go ahead and sing "Scarborough Fair" while you're at it.



REUSE WASTEWATER

Get a rain barrel to collect runoff from your roof and use that water on non-edible plants.



TIMING IS EVERYTHING

Water the garden in the morning or evening. The hot midday sun will evaporate water before it has a chance to sink in.



A New Climate



PHOTO PROVIDED BY GARY NABHAN

Interview by Erik Hoffner, *World Ark* contributor

Feeling the heat yet? The summer of 2015, the hottest in recorded history, melted roads and killed thousands in India and Pakistan. It also prolonged a crippling drought in the American West that triggered controversial water usage restrictions in California. While it can be hard enough for people to cope with these conditions, what about our food systems? How will farmers and gardeners adapt to this harsh new reality?

To answer this question, author and ethnobotanist Gary Paul Nabhan set out to discover the secrets of farmers who've dealt with drought and heat for thousands of years. He shares those answers in *Growing Food in a Hotter, Drier Land: Lessons from Desert Farmers on Adapting to Climate Uncertainty*.

WORLD ARK: Did writing the book help you feel less helpless in the face of the drought that's been haunting your home state of Arizona?

GARY NABHAN: I was disoriented by the catastrophic and unseasonal weather events we were having that damaged food crops, and I saw that you can't have just one strategy for dealing with climate change. You have to deal with wind, heat and water stress, plus catastrophic freezes in some places, so there can't be a simple silver bullet formula. We need multi-pronged adaptation and the building of resilience through diversity.

What most surprised you about your research?

The biggest surprise for me was realizing the answers are less about having adapted seeds and more about

having adaptive farming systems. Those who have lived in arid lands for millennia have developed strategies that can be shared with other parts of the world now facing weather unpredictability, like drought.

Does the U.S. have time to adapt to what's coming?

While the U.S. has buffers in place like crop insurance that other countries don't have, there's been denial that the situation could get serious. But even in Arizona people are remembering strategies that have been neglected for years. So it's not that we're unprepared, it's that we're rusty at dealing with this and need to hear from others who have answers that we haven't employed. So I don't think we're starting from scratch. That's one reassuring message from the book. People who just 10 years ago wouldn't

have picked up a book like this are incorporating its concepts into their repertoire of strategies for being a good gardener or farmer.

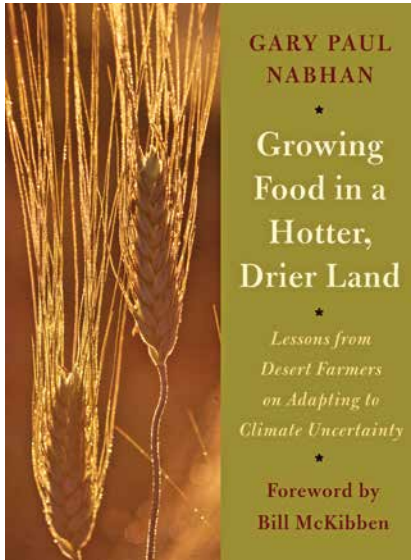
It's been a couple of years since the book was published. Are there any updates you would include now?

I would include the micro-aspiration irrigation systems that are hybrids of old technologies and modern drip irrigation, where you put porous bulbs at the end of drip irrigation lines buried in the soil that disperse water deeper into the soil over a longer period of time. And their size makes them harder to damage than big clay pots (i.e. ollas, which have been used in this manner traditionally). So people are hybridizing old and new methods rather than just looking backward.

Another thing I couldn't cover



for Farming



adequately in the book because it was just emerging at the time is an increasing trend in developed countries of growing vegetables in the partial shade of solar collectors mounted on high posts, which gives the plants a cool-down, which increases yields. So it's solar farming, getting electricity and food from the same piece of land.

I love that you focus on sharing information and ideas with neighbors. How important is that community aspect to increase agricultural resilience?

It's huge. We can't save food systems through the efforts of just one inspired innovator, we need whole communities innovating in the same way. I just visited a farmer in northern Arizona who is trying to develop water-conserving techniques, but

he's surrounded by people pumping groundwater to irrigate pecan trees, so even though he's conserving water on his farm, the aquifer under him is declining. We need community-based strategies, like we do for fighting pollinator decline. Attracting pollinators to a single farm when the neighbors are using insecticides or herbicides that kill bees and their host plants proves that no one can do this alone. A community supplies feedback and mutual support, so that when someone figures out a problem, the solution can be adopted by the neighbors. It's positive economically and socially, rather than a scenario of everyone being in this for themselves.

Besides capturing water for irrigation, the book also talks about harvesting nutrients as part of the same operation. How important is this second piece?

While any good harvesting system delivers water, it doesn't take that much extra effort to get the nitrogen-rich detritus that sometimes comes with it incorporated into your soil through simple techniques. I think it's the hidden benefit of water harvesting in legume-dominated ecosystems, which the savannas of Africa, Australia and the U.S. are. There's a place 25 miles from me that's capturing a million gallons of nutrient-rich water a year through water harvesting for a 4-acre orchard and a nearby pasture. In just two years, some of the fruit trees are already 20 feet tall from the added nutrients. The growth rates are just extraordinary. Techniques like

this have been used in Senegal and other African countries, as well as in Mexico and the U.S. I think it will become more and more widespread in the arid lands.

How important are perennials to your vision of a more drought-proof food system?

The no-till solutions that perennial crops require allow you to build soil—no country can afford to lose soil anymore—plus they increase soil moisture levels.

What would your drought-proof farm of the future look like?

I imagine having not just multiple crops but multiple life forms. I'd want deep-rooted cacti, legume trees, succulents like agave or century plants, and vine crops with deep roots. It would be more labor intensive than what we get away with today with our fossil fuel usage. My orchard has 150 fruit varieties, and even though not all of them do well every year, I will always get a bounty since they produce at different times and in a staggered manner. And they give me a diversity of nutrients along with adaptation to climate uncertainty, because when we have catastrophic events, there will be quicker recovery if we have that variety than if we had put all our eggs in one basket. ■

.....
To learn more about Gary Nabhan's work as a writer, conservationist and farming advocate, visit garynabhan.com.

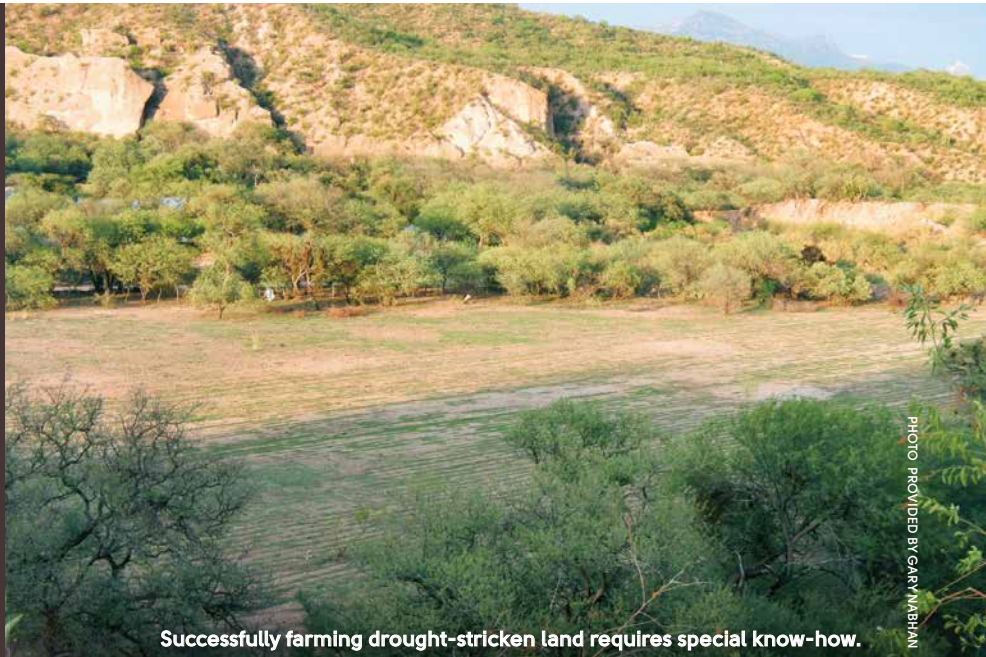


CAPTURING THE RAIN

As the climate warms, weather patterns become less certain. Some regions dry out while others soak in more frequent and wild storms. Even author Gary Nabhan, an Arizonian and expert on the traditional agriculture of desert regions, is surprised by how quickly the changing climate is impacting farming.

Growing Food in a Hotter, Drier Land maps a way forward in this shifting landscape, sharing expertise from farmers whose cultures have been perfecting arid-land agriculture for millennia. In the following excerpt from his book, Nabhan captures ancient knowledge and personal innovation that farmers in other places, including the U.S., can use to adapt and thrive.

—ERIK HOFFNER



Successfully farming drought-stricken land requires special know-how.

PHOTO PROVIDED BY GARY NABHAN

THE FOLLOWING EXCERPT IS FROM GARY NABHAN'S *GROWING FOOD IN A HOTTER, DRIER LAND*.

It has always struck me that this desert elder—even in his late 70s—did not think of himself as a passive victim of drought or climate change, despite his sense of grief that the rains were dying.

Three decades ago, an elderly farmer in the Sonoran Desert surprised and disoriented me by using a phrase I had never heard before. His name was Jerome Ascencio, and he had been involved for more than 50 years in tending and irrigating crops near the US–Mexican border, exchanging traditional farming knowledge with Anglo, Hispanic, and Native American farmers and farmworkers. He himself had labored for many years as a farmworker in large pecan orchards and cotton fields fed by pumped groundwater and diverted river water. But when I knew him, Mr. Ascencio tended his own field, fed exclusively by storm runoff generated by summer monsoons and channeled onto his land from the ephemerally flowing streams that we call desert washes or arroyos.

Because Mr. Ascencio was entirely dependent on sporadic storms to provide the moisture he used to grow his food, he was unusually attentive to how the timing and intensity of rains had shifted over his lifetime. And so, when he conceded to me that he thought *the rain was dying*, I listened up:



Amadou Sall heads out to work in a communal garden in the Sahel region of Senegal, where rainfall is sparse.

PHOTOS BY OLIVIER ASSELINE



Fatou Mata Juide Ba uses well water to grow vegetables in Bonjisinthlang village, Senegal.



Wells must be very deep to harvest water during the dry season in the Sahel.

"Now the rain is dying. Sometimes I feel so sad. I just stay here waiting ... I don't do anything until those rains come ..." Farmer Jerome Ascencio

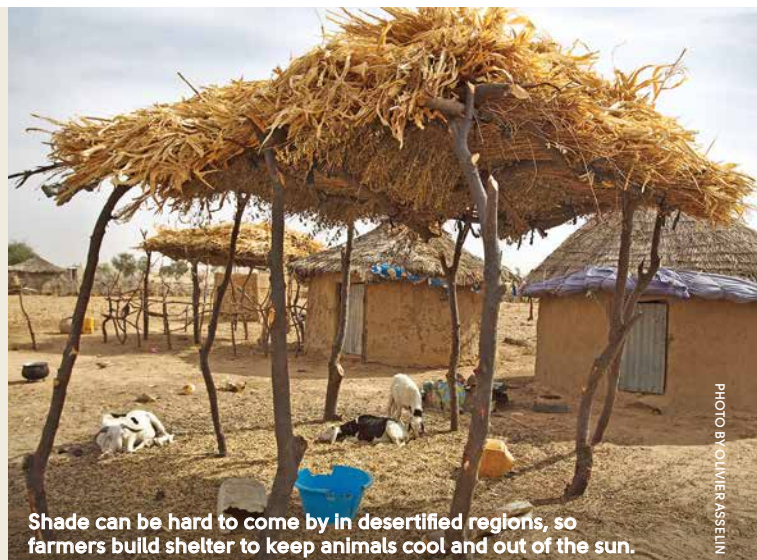
"Rain, that's the main thing in the desert ...," Mr. Ascencio said to me in a voice that was hardly a whisper while he looked up at a cloudless sky. He was thin and tired, as were his clothes; he wore faded, bleached-out blue jeans that barely hung on his 20-inch waist, a twice-mended snap-button western shirt, old cowboy boots, and a straw hat that brought a long shadow down across his wrinkled face. He shook his head and sighed. "You can't just plant anything without the rains coming, without those washes running."

He then explained to me that the advent of the rainy season was running a month later than its usual onset. And so he had kept his vegetable, corn, and bean seeds in a wheelbarrow under a shady ramada rather than planting them, even though it was now late July. In short, terse sentences—for English was the last of three languages that he had learned over his lifetime—Jerome Ascencio tried to explain how something in the world had begun to go wrong for him: "Now



Baobob trees are specially adapted to dry conditions.

PHOTO BY GEOFF OLIVER BUGBEE



Shade can be hard to come by in desertified regions, so farmers build shelter to keep animals cool and out of the sun.

PHOTO BY VOLMER ASSELIN

It has always struck me that this desert elder—even in his late 70s—did not think of himself as a passive victim of drought or climate change, despite his sense of grief that the rains were dying.

the rain is dying. Sometimes I feel so sad. I just stay here waiting . . . I don't do anything until those rains come . . ."

And yet, rather than throwing in the towel and leaving his field fallow, Jerome Ascencio was intent on shifting his efforts to changing conditions, or as Sandra Postel puts it, "adapting to the new normal." When three storms came in early August, his field received enough sheetflow of stormwaters to make the soil moist enough for planting. He had carefully situated his half-acre field so that it captured the runoff and compostable plant matter from 30 acres of desert slopes just upstream from it. The nutrient-rich floodwash that was deposited by floodwaters entering his field was the same compost-like soil amendment that his neighbors in Mexico called *abono del río*. Although he had never heard the phrase *water harvesting* at any point in his 70-some years of living, it was his livelihood, his love, and he was good at it.

What fascinated me most about Mr. Ascencio's responses to that drought was that he was so eager to shift and diversify his strategies to ensure that his corn, beans, and vegetable crops received adequate moisture. First, he asked me to help him dig a small reservoir just upstream from his field. When it filled up on a single

rain, then quickly drained as the waters soaked into the surrounding sand, he asked me to help him line the pond bottom with a sheet of plastic and bentonite clays. This small reservoir provided him with an opportunity to hand-water seedlings between summer rains, after the soil moisture had burned off from the field surface.

But Mr. Ascencio did not stop there. We brought truckloads of composted leaf litter in from where we found it deposited on the ground beneath mesquite trees on the long dirt road into his homestead. He incorporated this nitrogen-rich composted matter into his field soils just as he did the leaf litter that flowed in with the sheets of runoff. On occasion, he also added guano taken from a nearby cave, hoping to build up both nutrient levels and moisture-holding capacity.

It has always struck me that this desert elder—even in his late 70s—did not think of himself as a passive victim of drought or climate change, despite his sense of grief that the rains were dying. Instead, he responded with effective innovations that offered him more options to gather and hold water in and near his field, and to increase the capacity of his field soils to make the best use of that moisture right where his plants grew. ■

A Total Life Changer

**FORMER HEIFER RANCH
VOLUNTEERS ARE SHAPING
THE FUTURE OF AGRICULTURE**



By **Ragan Sutterfield**, *World Ark* contributor

HEIFER RANCH in Perryville, Arkansas, is known as the place to visit to learn about food systems, hunger and poverty. What's less known is that the Ranch is run largely by young volunteers who live in community housing, tend animals and fields, and lead tour groups. Being a Heifer Ranch volunteer can have a tremendous impact, not only on the volunteers, but also on the world. Many volunteers are inspired to create businesses and organizations that are helping reshape our food systems. Here are the stories of four volunteers using the inspiration they got at the Ranch to reshape the future of American agriculture.





PHOTO BY KRISTY ALLEN



PHOTO BY JACOB SHEATLEY

Kristy Lynn Allen

RANCH VOLUNTEER 2008-2009

THE BEEZ KNEEZ, MINNEAPOLIS, MINNESOTA

Kristy Lynn Allen first came to Heifer Ranch as a chaperone for a high school group. She was going into her last semester at the University of Minnesota, looking for where she would land next, and Heifer Ranch seemed like the perfect place to continue her interest in global studies. From 2008 to 2009, she volunteered to care for livestock and lead groups through the Ranch's Global Village programs. It was an experience that changed her life. "Heifer Ranch was where I formed my passion for agriculture," said Allen, who has dedicated her career to the tiniest of livestock—the honeybee.

While at the Ranch, Allen heard a program from a visiting agronomist about colony collapse syndrome. This was well before the mysterious die-offs of honeybees hit the mainstream press, and it intrigued Allen as much as it worried her. Bees are a critical part of our ecosystem, essential for agriculture, and yet many were dying off for reasons scientists still do not completely understand. Allen began to wonder how she might help the bees.

In the meantime, her aunt married a beekeeper in Minnesota, and after a short stint in Ecuador, Kristy went to work for her beekeeping relatives. "The moment I stepped into a beehive, I was transformed," Allen said. "It smells good, it sounds good, and there are always unknowns in beekeeping, so it is always challenging."

A passionate year-round cyclist in Minneapolis, Allen soon combined her love of bicycles and bees into a honey delivery business called The Beez Kneez. At first she delivered her aunt and uncle's honey, but eventually Allen began her own urban apiary.



PHOTO PROVIDED BY KRISTY ALLEN

In the five years since The Beez Kneez began, Allen has grown the social enterprise far beyond a delivery business. The Beez Kneez offers education programs to teach school children about nature through bees, incorporating the experiential education approach Allen learned at Heifer Ranch. The Beez Kneez also offers education to adults through a week-long bee camp, where participants can learn to keep their own beehives.

To enable more urban dwellers to keep bees, The Beez Kneez also created a collective honey house where beekeepers use special pedal-powered honey extractors. To date, pedaling beekeepers have extracted over 10,000 pounds of honey.

At the heart of The Beez Kneez are, of course, the bees themselves. Allen continues to be a passionate advocate for their welfare. "We as human beings can learn a lot from how bees work as a social organism," Allen said. "Bees are concerned for the good of the whole rather than their individual egos."

Jack Sundell

VOLUNTEER 2006-2007

THE ROOT CAFÉ, LITTLE ROCK, ARKANSAS

Jack Sundell had just returned from a Peace Corps tour in Morocco when he signed on to volunteer at the Ranch. "It was a kind of cultural halfway house," Sundell said. "At the Ranch, I was isolated with like-minded people, and so it was the perfect place to get over the culture shock of returning to America."

Working from early 2006 through mid-2007, Sundell held a variety of positions at the Ranch. He started in education, then switched to raising livestock. It was during his time at the Ranch that Sundell began to understand local food systems and develop the vision for what would become his business, The Root Café. "A year and a half spent on a working farm, seeing the CSA (Community Supported Agriculture) produce vegetables used in the cafeteria, raising animals that were used in the cafeteria, gave me a new perspective on where my food was coming from and a chance to be a part of that process," Sundell said.

It was from that experience that Jack Sundell and his wife, Corri Sundell, with the help of Rebecca Stover Roetzel and others he met at the Ranch, formed The Root Café. The Root is a bustling community fixture on Main Street in Little Rock, with a clientele of regulars that range from local hipsters to suited business executives. The food and culture at The Root earned national attention, including features in *Garden & Gun Magazine* and HLN channel's *Growing America* series.

While many restaurants have begun incorporating local foods into their menus, local food is the core of what The Root is. On every level, the menu is built from what is available from local farms. "Over the course of a week, we purchase from around 25 producers, and over the course of a year it is over 60," Sundell said.



This dedication to local food is what drives customer loyalty. "We have a great clientele," Sundell said. "Because we are truly local, we often run out of things and people are so understanding."

With grants from HLN and Mission Main Street, the restaurant is expanding its seating area using recycled shipping containers—an innovative design that will be the first of its kind in Arkansas. With the expanded space, The Root will also begin serving dinner (it is now only open for breakfast and lunch), but expansion won't mean a change in commitment to local foods. The model of local agriculture Sundell first learned at the Ranch will continue to make The Root an example of just how delicious locally grown food can be.





Betsy Trice

VOLUNTEER 2003-2004

PEACEMEAL FARM, LLC, HADENSVILLE, VIRGINIA

Betsy Trice grew up on a 5-acre biointensive farm, but it was not until she volunteered at Heifer Ranch that she met other people her age who were interested in agriculture. "I'd always known people who farmed from my parents' generation, but it was encouraging to meet so many young people interested in farming," she said.

Her parents were long-time Heifer donors, and Betsy volunteered at first as a summer intern but decided to stay, eventually joining the Ranch's staff as a volunteer manager.

When the opportunity to return to her native Virginia and farm on family land arose, Trice and her husband took it. They farm 12 acres using the same biointensive methods Trice teaches to her students at the local community college.

On the farm, the Trice family raises goats for meat, chickens for eggs and a large variety of vegetables that they sell through local markets. Their specialty, however, is growing and preserving seeds. Peacemeal Farm contracts with three different seed companies to grow seeds for home gardeners and organic farmers. From edamame soybeans to peanuts, tomatoes to sweet peppers, the Trices grow seeds that hundreds of gardeners and farmers will use to produce their crops.

Both Betsy and Chris Trice work outside jobs to help support their farm. Fortunately, both jobs involve agriculture. Betsy teaches sustainable agriculture courses at a community college, where her students remind her of the volunteers she managed at Heifer Ranch, "people with a thirst for knowledge to learn how to grow good food."

Chris Trice works with inmates to raise beef sold at regional grocery stores. He also assists film and television crews that film on the prison's pastures. Recently, he helped with the Steven Spielberg film *Gettysburg*, and he is now helping a crew with an HBO series.

Eventually the Trices hope to make a sustainable living from Peacemeal Farm. "Beef cattle is our next enterprise," Betsy Trice said, adding, "We'd also like to expand our seed contracts. We think growing seeds will continue to be a core part of the farm." With that, the Trices will literally be growing the future of sustainable agriculture.





PHOTO PROVIDED BY BILLY POLANSKY



PHOTO BY JACOB SHEATSLY

Billy Polansky

VOLUNTEER SUMMER 2007, SUMMER AND FALL 2008
COLUMBIA CENTER FOR URBAN AGRICULTURE, COLUMBIA, MISSOURI

Billy Polansky was a geography major at James Madison University in Virginia when he learned about Heifer Ranch at a volunteer fair. In the summer of 2007, Polansky came for a one-month volunteer stint.

"I saw that the Ranch was a really special place and that one month wasn't enough time to spend there," Polansky said. When he graduated college, he bought a one-way ticket to Arkansas and headed to the Ranch for a longer stay. Volunteering over the summer and fall of that year, Polansky said he had no life plan, he just wanted to learn and gain new skills.

A life plan began to form when Polansky met Carrie Hargrove, another volunteer. The two fell in love, and Polansky followed her to Columbia, Missouri, where they married. Polansky joined up with a group of people working to turn a vacant urban lot into a garden space in cooperation with the University of Missouri. Using his skills from Heifer Ranch, he went to work building gardens, organizing composting and helping college students move into more sustainable lives.

"The garden was beautiful," Polansky recounted. "Every square inch was in use." That garden project grew into an independent nonprofit called the Columbia

Center for Urban Agriculture. The group expanded into education outreach to local public schools. In 2010, they took over a large lot in the city center where they now have extensive gardens, chickens and compost piles that provide a place for people to learn about how to grow food for themselves.

"It was a bootstrapped project," Polansky said. "We worked at it as a labor of love until 2011, when we could finally begin to pay ourselves a very modest salary." With an Americorps grant, they eventually grew to six people working full time.

With the additional staff, their scope broadened. One of their central projects is the Opportunity Gardens program in which staff help low-income families start home gardens and then provide support for three years so the gardens are sustainable.

"Heifer's whole essence is empowering people, and that is what the Opportunity Gardens are all about," Polansky said. "We don't want to grow food for people. We want to empower people to have their own gardens at home."

Though his time at the Ranch lasted only a few seasons, it was "a total life changer" for Polansky that continues to bear fruit. ■



Heifer Ranch and its sister site, Heifer Farm in Rutland, Massachusetts, have openings for long-term volunteers to live and work on-site for three months or longer. Residential volunteers receive housing, training, a non-taxable stipend, gift shop discounts and transportation. To apply, send your resume to lcvol@heifer.org



The parched and depleted soil in many parts of Haiti makes farming a grueling pursuit.



DIRT POOR

EXTREME DROUGHT AND DEFORESTATION LEAVE HAITIAN FARMERS STUCK WITH PARCHED, UNYIELDING SOIL. AFTER A ROCKY START, PROJECT PARTICIPANTS AND HEIFER HAITI STAFF REALIZED THAT ACCESS TO WATER HAS TO BE THE FIRST STEP.

By **AUSTIN BAILEY**, *World Ark* senior editor

Photos by **LACEY WEST**



Water is precious in Tranquille, so Eder Exantus channels runoff from a tap to irrigate his garden.

The new tap in the dust-choked mountain village of Tranquille kicks on only during daylight hours, a quavering stream prone to sputter out with no warning. So Eder Exantus stands ready by the cement basin at the village center, fingernails bared and ready to dig. When water sloshes over the basin's edge, he channels it into gullies that he scrapes into the dirt with a machete and his bare hands.

This makeshift system is the only irrigation for a V-shaped garden that radiates from the tap across a busy walking path. Passers-by have to slow down and step carefully around the delicate plants, but no one complains about

this seeming mirage of eggplants, banana trees and tomatoes. Wasting even a drop of water is a heartbreaker in this depleted, thirsty place.

Tranquille, a small settlement in the Commune of Baie de Henne, sits on the high desert, a chalky moonscape of dust and rocks that clashes with history book accounts of a Haiti blanketed by green when Europeans first showed up 500 years ago. That tropical green and fertile soil disappeared a lifetime ago; only an estimated 2 percent of the original forest cover remains. Today, farmers do their best to coax life out of a ground scraped bare and scorched by relentless sun.

Heifer International reenergized its Haiti program in the aftermath of the 2010 earthquake, and Baie de Henne was one of the first stops. "When the people approached us for help, we started like we usually do," said



Hand-dug channels carry water to the fruit and vegetable plants growing near the village tap.



Cacti are one of the few types of greenery that thrive in the driest regions of Haiti.



An eggplant grows in Eder Exantus' garden.

WASTING EVEN A DROP OF WATER IS A HEARTBREAKER IN THIS DEPLETED, THIRSTY PLACE.

Hervil Cherubin, country director for Heifer Haiti. "We helped with seeds and livestock, and we trained them. But we didn't take into account the severe climate change."

The weather was hotter and the land drier than the Heifer staff anticipated. On land that was already parched and leached of nutrients, crops quickly withered or seeds failed to sprout altogether. When goats started dying, everyone realized it was time to change course.

"So we came back and had a community meeting under a tree," Cherubin said. "They had a solution. They said, 'If you will help us get water, you don't need to do anything else.' We said yes, we can do it."

And with that, the Heifer project in Baie de Henne shifted focus, bringing many other Heifer projects in Haiti with it. "We realized we couldn't work in these communities without water," Cherubin explained.



Auguste Augustave uses water that spills from the village cistern to irrigate his garden.



Goats are healthy and productive now that fresh water flows to the breeding center.

THE MIRACLE TREE

Auguste Augustave was among the first batch of Baie de Henne farmers to receive Heifer's help. In 2012 he marched 15 newly gifted goats into a shaded pen he'd built himself, with hopes of establishing a successful breeding center. But growing forage for his new animals was hard in the dry heat, and scavenging it on his denuded mountaintop was even harder. The closest water source was a 2-mile walk away, and Augustave's own body grew gaunt as he made trek after trek to the well.

Seven goats died in the first year. "It made me feel awful, but I could do nothing," Augustave said. "The drought was brutal."

In 2014, Heifer invested \$25,000 for a pump and other infrastructure to bring water to the villages of Tranquille and Terre Blanche from a spring two mountains away. The money covered the hardware, and beneficiaries in Baie de Henne and nearby villages stepped in to provide the labor. Pipes now flow to six fountains in and around Baie de Henne,

with three more in the works to other sites.

The pipe ends at a health clinic set up to treat patients in the cholera outbreak that came into the country with international relief workers soon after the 2010 earthquake. Transmitted in tainted drinking water, cholera has infected more than 700,000 Haitians.

The school principal in nearby Mapou reports that students are missing school less often since the pump and a 4,000-gallon cistern came on line. The cistern sits on a piece of Augustave's land that's at the highest spot in the village, positioned there so gravity will send the water to the taps lower down the mountain. Augustave and his neighbors use the cistern to water tiny sprouts underneath a mat of palm rushes angled to keep out the roasting sun. Papaya, olive, plantain and coffee trees grow in plastic sacks lined up with precision and watered with care. The tree nursery also includes moringa, known as the miracle tree for the high protein, calcium and iron content of its leaves and seed pods. The name is apt



Goats are fenced or tethered to keep them from destroying gardens in Tranquille.



Sprouting trees and vegetable plants get plenty of care at a nursery in Tranquille.



LaVina Augustin shows off healthy produce grown with water from the new taps.

because of the tree's ability to grow and thrive in extreme heat and drought. A few feet away from the trees, a tomb-shaped roof of palm rushes shades inch-tall tomato plants. When they're sturdier, the tomatoes and saplings will be planted around the village, at least one tree at each house.

Goats are surviving and multiplying now that they have water to drink and enough food to eat, Augustave said. He now has 65, even after passing goats on to neighbors and selling a few. Augustave himself put on a few pounds of muscle since he now has the irrigation



The cliché tagline is that Haiti is the poorest country in the western hemisphere. But did you know it's the poorest country in the northern hemisphere, too? Port-au-Prince is an easy two-hour flight from Miami, but Haiti is an entirely different scene from its northern neighbor.



Only 10 percent of crops in Haiti are irrigated. The rest rely on rainfall.



Haiti imports more than 50 percent of its food.



The country is severely deforested, with only 2 percent of the original tree cover remaining.



One in three Haitian children is stunted (irreversibly short for his or her age) by malnutrition.



The unemployment rate is over 40 percent.

Sources: CIA World Factbook, World Food Programme



Wilbert Jean-Louis stands with his wife and youngest son next to their goat shelter.

**SOMETIMES WE PLANT
AND HARVEST NOTHING.**

—farmer Wilbert Jean-Louis



Children without enough money for school stay in the village all day.



The tap in the village center is a gathering place for children.



Students stop for a drink after walking up the mountain from their school.

water to grow carrots, onions and tomatoes, and to incorporate eggs and meat into his family's diet. He helps his neighbors as much as he can, lending out stud bucks to improve the genetic pool of goats in Baie de Henne and sharing vegetables when he can. Still, the poverty of this place is evident in the clothes the children wear: dusty, torn t-shirts, often with nothing but underpants on the bottom. One little girl had only a skirt, settled around her neck like a poncho.

Other children wore crisp gingham uniforms, a sign their families were doing well enough to cover school fees. The hope is that the goats will continue to thrive, the trees and vegetables will grow, and soon all families will have enough money to send their children to the school at the bottom of the mountain.

A LAKE WITH NO WATER

Paul Dieulifrance, 64, wears a blazer, creased dress pants and shoes that shine despite the



Paul Dieulifrance welcomes guests to his home in Cabaret, a dusty farming town.

ubiquitous dust. He doesn't get so dressed up very often, but today he's celebrating the 11th birthday of the Farmers Association of Cabaret. The group formed after a heavy rain, when mud clogged irrigation ravines and farmers had to work together to clear them. The farmers stuck together, helping each other to farm and eventually pooling money to buy a tractor and pay the fees whenever a member needed medical care. Their anemic reserve fund can't cover non-emergency costs, though, so Dieulifrance's wife carries on blindly after she broke her glasses. There's no money to replace them.

Even with cooperating and pooling resources, farmers in Cabaret fail as often as they succeed. Dieulifrance walks an hour each way to get water for his house and crops, and his commute is the norm now that many water sources have long dried up. The trees that



Dieulifrance would like to buy new glasses so his wife can see better.

used to shade and protect the soil disappeared decades ago, chopped for charcoal. The hard-baked earth that's left behind doesn't hold water or nutrients, and crops suffer.

"Sometimes we plant and harvest nothing," said Wilbert Jean-Louis, a farmer and father of three who dreams of replacing his crooked mud house with one made of cement block. He calculates that he will need to sell 20 to 25 goats to make the \$2,200 the new house would cost. After a gift from Heifer and some diligent care



Dirt filled in what was once a lake in Cabaret. Heifer is helping to restore the lake to provide irrigation and drinking water.

and breeding, Jean-Louis' herd numbers 13, even after passing on five. His progress, however, is due for a minor setback; the donkey he uses to haul water to his parched and near-treeless homestead twice a day is hobbling and gray, in grave need of replacement. And his youngest son suffers from a persistent, wet cough that begs for a doctor's attention. Factoring in these expenses, Jean-Louis suspects he can start building his new house in four years.

This air of wary optimism threads through the crowd at the 11th anniversary

celebration for the Farmers Association of Cabaret, which marks what people hope will be a change of fortune. Heifer started working here two years ago, bringing goats, seeds and training to bolster the work the farmers association was already doing. A few hundred people sit under a pavilion for speeches, singing and dancing that lasts all afternoon, topped off by a Passing on the Gift ceremony where goats tethered with collars made of twigs change hands. One woman hands over a rafter of five turkeys, balanced implausibly in the crook of one arm.



A goat waits its turn at a Passing on the Gift ceremony in Cabaret, Haiti.



Turkeys were among the animals changing hands at a pass-on celebration.



Belisaire Anseinio, 72, remembers when the lake was full and crops grew abundantly here.

“HARD TIMES COME, YOU STILL NEED TO EAT. YOU HAVE NO OTHER CHOICE. THE MISERY MAKES THE PEOPLE CUT THE TREES.”

—Belisaire Anseinio

The animals and seeds exchanged at the pass-on ceremony will need a convenient and reliable source of water to thrive, hence the next phase of Heifer’s work in Cabaret. Belisaire Anseinio, 72, leads a tour of the cracked and desolate dry lakebed that used to be Mare Verger, a 25-acre lake that dried up for good in 2013. Decades ago, the lake

was full and the fields around it produced squash and pumpkins year-round, Anseinio said. Today, the lakebed is filled with crackled dust and ringed with only cacti and brush.

The transformation began when dry weather destroyed crops, forcing farmers to chop trees for charcoal they can sell. “Hard times come, you still need to eat,” Anseinio explained. “You have no other choice. The misery makes the people cut the trees.” With the trees gone, topsoil washed away and mud filled the lake to its brim, then dried hard as cement. Anseinio and others are eager to start digging to rebuild Mare Verger. Heifer funds will cover the engineering and construction costs to scoop out a permanent lake with a capacity to irrigate 250 acres of farmland.

Bringing the lake back is the best chance Cabaret has to reinvigorate its agricultural tradition and keep its population fed and



Charred dirt remains after people turn brush into charcoal.



A man from Cabaret hauls kindling back home.

**WE REALIZE THAT ORGANIZATIONS
THAT COME AND GIVE US FOOD EVERY
DAY, THAT IS NOT THE SOLUTION.**

—farmer Leger Macksonley

healthy, farmer Leger Macksonley said. Until the lake is dug and filled with rain, a process that could take years in this arid place, Macksonley said he will continue to walk long distances to collect water and fodder for his animals. And he knows he will sometimes have to rely on handouts to feed himself and his family. “We’re doing the best we can, but it’s really rough,” he said. “We realize that organizations that come and give us food every day, that is not the solution.”

As he talks, he watches a man about 200 yards away kneel down and set fire to a pile of brush gleaned from an already near barren landscape. The man is making charcoal, still the best option for farmers here when their crops fail and the immediate need to survive today overshadows worries about what will happen in the future. Macksonley shrugs and shakes his head. “That’s what people do,” he said. “They cut the trees, make charcoal, and live.” ■

WHAT'S THE DEAL WITH CHARCOAL, ANYWAY?

Charcoal burns hotter and more slowly than wood. It also produces less smoke and is far easier to transport.

Most Haitians, both in cities and rural areas, depend on charcoal for cooking. But it's not the charcoal we're used to, pressed into pillowy shapes and sold in paper bags.

The charcoal in Haiti is almost always handmade from wood, roots and brush.

Charcoal is mostly carbon, made by cooking wood in a low-oxygen environment to burn off water, hydrogen and other elements. With most of its components burned away, the final product weighs only a quarter of the wood's original weight. Commercial charcoal processors burn in huge steel or concrete silos. In Haiti, most charcoal is made under mounds of dirt.

Charcoal production is a big chunk of Haiti's economy, employing an estimated 200,000 people. When crops fail and other work can't be found, many people resort to making and selling charcoal because there's always a market for it. With only 2 percent of the country's tree cover remaining, some people are resorting to chopping bushes and digging up roots to make charcoal.



FACT **VS** FICTION

What I Learned (and Unlearned) in Haiti

By Molly Fincher

FACT

Haitian folklore is the coolest folklore.

ZOMBIES ORIGINATED IN HAITI,

and the country is home to the infamous pirate haven Tortuga.



LAMBI,
the Haitian
preparation of conch,
is a guaranteed
crowd favorite.

Born of the contact between French colonialists and African slaves,
HAITIAN CREOLE IS EMBLEMATIC OF THE COUNTRY'S RICH AND PAINFUL HISTORY.

The Haitian idiom "Li pale franse" means "He cannot be trusted" or, translated literally, "He speaks French."

HAITI IS THE ONLY COUNTRY IN THE WORLD ESTABLISHED BY A SUCCESSFUL SLAVE REBELLION.



FICTION

Some say Haiti's problems are Haiti's own fault. But in fact, trouble began when Columbus first landed on Haiti's shore.



Since then, the country has a long history of exploitation at the hands of most every nation it has had dealings with.



In the early days of the AIDS epidemic, Haiti was labeled as a locus for the mysterious disease. In truth, the deadly virus was brought to Haiti by tourists from other countries.

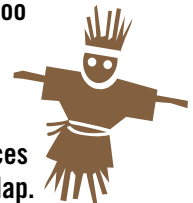
"BUILD BACK BETTER"

was the mantra in the aftermath of the 2010 earthquake. But experts say Haiti has only just gotten back to the place they were before the disaster.

Despite conventional wisdom, Voodoo is not the primary religion in Haiti.

IN FACT, MOST HAITIANS (80 PERCENT) ARE CATHOLIC.

About half of the population practices Voodoo, marking a significant overlap.



▶ **\$2**

PROXIMITY TO THE U.S. SAVES HAITI FROM SEVERE POVERTY? NOPE. HAITI IS ONE OF THE POOREST COUNTRIES IN THE WORLD—2 OUT OF 3 HAITIANS LIVE ON LESS THAN \$2 PER DAY.



J/P HRO supplied electricity to the camps to improve safety.

PHOTOS PROVIDED BY J/P HRO



Camp residents take advantage of quality dental care.



Repairing damaged homes is part of J/P HRO's agenda.

What Works: Rebuilding from the Inside Out

By **Austin Bailey**, *World Ark* editor



Gary Philoctete

THE TORRENT OF INTERNATIONAL AID that swept into Haiti after the 2010 earthquake brought lots of money and people to help rebuild. The relief groups that swooped in get varying ratings from critics, but one organization, J/P HRO, continues to win a strong chorus of accolades and support. Formed on the fly in response to the earthquake, J/P HRO ramped up its work quickly. With the organizational

acumen of co-founder and philanthropist Sanela Diana Jenkins and the star power of co-founder Sean Penn, J/P HRO mobilized funding and staff to help provide temporary shelter and medical care for displaced families and eventually move them back into permanent homes.

Key to the group's effectiveness is its staffing: 95 percent of J/P HRO's employees are Haitian or of Haitian origin. Executive Director Gary Philoctete, also born in Haiti, leads the staff of more than 350 people.



Medical teams cater to new mothers and their babies.



As they rebuild houses, camp residents pick up new construction skills.



School provides continuity for children displaced from their homes by the 2010 earthquake.

"Someone coming from the outside, even with the best intentions and competencies, it will take time to learn the realities of the culture and the people," he said. "With Haitians on staff, we already have a good understanding, so it goes really fast."

Philoctete worked for larger, more established nonprofits before joining J/P HRO three years ago. "I wanted to join the organization because it's very young and dynamic," he said. "We have the flexibility to innovate and be creative."

J/P HRO initially worked on setting up temporary camps, then fleshed out those camps

so occupants could access schools, medical care and sanitation. Now that most families have returned to repaired homes or new ones, J/P HRO is reforesting camp sites and improving the quality of life for people settling into permanent homes.

While the earthquake is six years in the past, great need still exists in Port-au-Prince and the rest of the country. Philoctete said he hopes the international community doesn't forget about Haiti anytime soon. "Haitian people just need a little push to move forward," he said. "After this little push, people can move on and continue by themselves." ■

Relief vs. Development

J/P HRO and Heifer International exemplify the two types of non-governmental organizations (NGOs) working in Haiti today.

J/P HRO (an acronym for the founders' names, Jenkins and Penn, and Haiti Relief Organization) started as a **relief** organization, coming in on the heels of disaster to help usher victims through the aftermath.

Heifer International is a **development** organization, and as such focuses on long-term solutions to entrenched poverty. Heifer has worked in Haiti since 1999.

Although the founding missions of these NGOs differ, they share a dedication to hiring local staff and working alongside participants to come up with solutions.

The photos from Abe Reiff's 1946 seagoing cowboy trip to Gdansk, Poland, served as the catalyst for granddaughter Peggy Reiff Miller's unintentional career.

The collage features several historical black and white photographs. One shows a man standing in front of a large, damaged building. Another depicts a group of men on a ship's deck. A third shows a man leaning over the side of a ship. A fourth shows a man in a uniform, likely a merchant mariner. A fifth shows a man in a uniform, possibly a pilot or crew member. A sixth shows a man in a uniform, possibly a pilot or crew member. A seventh shows a man in a uniform, possibly a pilot or crew member. A central document is a United States Coast Guard Merchant Marine's Document for Abraham Theodore Reiff, dated 11/9/96, with home address Millidgeville, Illinois. The document includes a photo of a man and a signature. Handwritten notes include "Kneeponto, Poland" and "Exit room 7 figure".

The photos from Abe Reiff's 1946 seagoing cowboy trip to Gdansk, Poland, served as the catalyst for granddaughter Peggy Reiff Miller's unintentional career.



The S.S. Zona Gale awaits loading in Baltimore, Maryland, in April 1946 for a shipment of 345 heifers to France.



The seagoing cowboy crew on the SS Villanova Victory deliver 198 cattle to Kavalla, Greece, in July 1946.



The Heifer Project made more than 80 shipments of cows to Germany throughout the 1950s to help refugee farmers rebuild their lives.

Nearly 7,000 men took to the high seas to deliver livestock via ship on Heifer's behalf after World War II. The deliveries came about through a partnership between the United Nations Relief and Rehabilitation Administration (UNRRA) and the Brethren Service Committee of the Church of the Brethren. Heifer still gives animals to families around the world, but today most of those animals are purchased in the regions where they're given.

Although the golden era of the seagoing cowboy is past, Peggy Reiff Miller, an author, historian and archivist, is keeping their stories alive through her work, which she describes for *World Ark*.

By **Peggy Reiff Miller**



Seagoing cowboy Cletus Schrock shares the story of his trip to Poland with Peggy in a 2008 interview.

REVIVING HISTORY

I never set out to become a historian or an expert, as I've been called, on seagoing cowboy and Heifer International history. All I wanted to do was write a novel.

It all started with a handful of my Grandpa Abe's photos. After he died, my father gave me an envelope of pictures from Grandpa's trip delivering horses to Poland in 1946. Years later in a writing course, I needed a topic for a young adult novel and remembered Grandpa's photos.

I thought, "Aha, a seagoing cowboy trip to Poland!" My instructor agreed it was a good idea. "Something new under the sun," she said.

Having grown up in the Church of the Brethren that birthed the Heifer Project, the topic of seagoing cowboys wasn't new to me; but I had never heard Grandpa's story and needed to know more. So in 2002, I started interviewing men who had made livestock trips like Grandpa's after World War II for the United Nations Relief and

Rehabilitation Administration and the Heifer Project. One cowboy led to another and another. Their stories were so fascinating and compelling, full of adventure, danger, humor, drama and even an occasional romance, that I was hooked. When I realized these stories were just hiding away in people's minds and drawers and attics, my mission changed to documenting this piece of little-known history. And I've been researching, writing and speaking about it ever since.



Magazines have been one avenue for telling the seagoing cowboy story.

Miller displays a printout of a color image of Faith, the first heifer donated, after finding the original color slide in the archives. Heifer Village, March 2014.

A picture book for all ages, *The Seagoing Cowboy* tells the story of a farm boy's trip to war-torn Poland after World War II.

It didn't take long to realize that I couldn't tell the history of the seagoing cowboys without also telling the related story of the Heifer Project, the early years of Heifer International. This expanded the scope of my research, such that I now have my own archive room filled with file boxes that feed my writing and speaking engagements.

My novel did get drafted, but it's resting. In the meantime, I've been sharing the seagoing cowboy story through magazine articles for adults and children, a DVD documentary, and a website and blog with twice-monthly posts (www.seagoingcowboys.com). My first book out of the chute will be a children's picture book, *The*

Seagoing Cowboy, to be released by Brethren Press in early 2016. Works in progress for adults include a book on the Heifer Project and one on the seagoing cowboys.

COWBOY CURATOR

My motivation has evolved over time. After my novel was drafted and I could have stopped researching, the cowboys themselves kept me going. To sit in their living rooms and listen to them tell about experiences that had a profound impact on their lives has had a profound impact on me. These men have entrusted me to be the caretaker of their stories, and I take it as my mission to see that their history of rebuilding a war-torn world lives on.

As I continued to interview cowboys, a second motivation for my work developed: connecting families with their own history. Like me, many grandchildren and even some children had never heard the story of their loved ones' seagoing cowboy experiences. And many cowboys themselves had not realized the scope of the program in which they had participated and its historical importance. Notes of appreciation I receive from cowboys and their children for rekindling these stories in their families make all my efforts worthwhile.

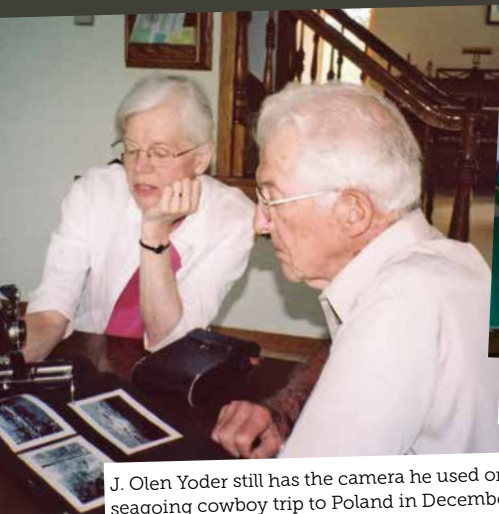
My work evolved to another, unanticipated level once my seagoing cowboy website went up in 2008. I had unwittingly become



Cornelius Queling was one of many grateful Heifer recipients of 1950. Peggy met him in Nierswalde, Germany, in September 2013.



German friend and translator Ingrid Marx, left, comments to Miller on the image of the heifer received by the family of Aloisia Werschmann, center, in 1950.



J. Olen Yoder still has the camera he used on his seagoing cowboy trip to Poland in December 1945.



Finding the Stanislaw Debert family who received a heifer from the Heifer Project and a horse from UNRRA in late 1945 was the highlight of Miller's research trip to Poland in October 2013.



Seagoing cowboys gather at the Funderburg Library of Manchester University for the unveiling of the Dan West permanent exhibit in May 2010.

a source of information, regularly fielding inquiries that came from children or grandchildren wanting to know about their loved one's cowboy experience, or from elementary through graduate students wanting information for papers they were writing, or from Heifer International staff needing answers for constituent questions. I struggle at times balancing this aspect of my work with the writing I want to be doing; but the seagoing cowboys have so graciously shared their stories and materials with me that I feel I have the responsibility of sharing them with others.

The latest evolution in my motivation has been my growing relationship with Heifer

International. The more I learn about Heifer's current work, the more excited and committed I am to be a Heifer supporter and promoter. I've realized that my work reaches many people who have never heard of Heifer. The more ways I can find to tell the seagoing cowboy story, the wider that story will travel; and the wider that story travels, the more people will be introduced to today's world-changing work of Heifer International. Thereby, history becomes a doorway to the present.

HIDDEN GEMS

With my research expeditions to a number of archives around the country, my work has been akin to mining for gems. Since 2004,

I've been up and down interstates from Indiana to Arkansas seven times to dig through historical files at Heifer headquarters in Little Rock or the vital records storage facility in nearby Maumelle or Heifer Ranch in Perryville. And I've struck gold many a time, finding nuggets that shed light on both the Heifer Project and seagoing cowboy histories.

One gem that set my heart fluttering was the seagoing cowboy card file. I knew from reports I had read that it existed, and I knew where it had once been located; but the person who had shepherded it through the years was deceased, and no one seemed to know where the card file went. Did it even still exist? I wondered.

Eighth
Cof. U.S.C. 26-543.5-7
June 29, 1950

RECIPIENT LIST OF HEIFER SHIPMENT

| BSC No. | State No. | Breed | Recipient (Siedlung Reichswald / bei Kiew) |
|---------|-----------|----------|--|
| 162 | R 61047 | Guernsey | Eberhard Thomas |
| 168 | P 105856 | Holstein | ✓ Frau Mischke |
| 164 | OL-92933 | Holstein | ✓ Friedrich Behnke |
| 168 | R 61080 | Holstein | Heinrich Rhode |
| 175 | R 35609 | Holstein | ✓ Paul Weissert |
| 180 | R 61071 | Guernsey | ✓ Alfred M... |
| 182 | R 35805 | Hol... | |

Age 11523
49

Name Abraham Theodore Reiff
Alie R. Reiff

Address Milledgeville, Illinois

Church Affiliation Brethren

Injections for: smallpox ☐ typhoid ☐ typhus ☐ tetanus ☐

Remarks First of Sept.
Likely will come East to visit and contact us

Report S.S. Pierre Victory Report S.S. Sailed
From Newport News From
To Poland To
Amt. due for trip \$1500 Amt. due for trip
Less: advance 50 Less: advance
travel 1750 travel
Amount paid 1750 Amount paid
Ck. No. 4440 Date 10/22/46 Ck. No.
G.M. 12/4/46 - ch # 5767 - 460.00

Personnel Witve Queling
Gustav Schwanks

* confidential on file
✓ visitation, read

Brüder einer Welt

2000. amerikanische Spendenkuh kam nach Haselstein (Hünfeld)

Präsident von Scharfenberg reicht Herrn Snider, dem Beauftragten des ...ales, zum Zel-



The Stars and Stripes Feature



A Helping Hand for World's Farmers

Heifer Project Incorporated aids poor farm families by

Then on my November 2007 trip to Heifer, I found it: four green metal index file boxes stuffed with 4-by-6-inch cards with the records of more than 6,800 seagoing cowboys hidden away as items number 217860-217863. I was soon holding in my hands the card for my Grandpa Abe. What a joyous day! And what a priceless find.

Three months later, I headed back down to Arkansas with my laptop and scanner and holed up at the Heifer Ranch for 10 days with those four metal boxes, scanning every single card. Heifer staff and I would now have the information at our fingertips to answer the caller who says, "My father was on a cattle boat trip after World War II. Can you tell me when

and where he went?" Recently, the information on the cards has been put into a searchable database for me by Ohio Heifer supporter Terry Thoreen, making it even more accessible.

Another motherlode I hit was the boxes with the records of more than 80 Heifer shipments to Germany that took place from 1949 through 1960. At the end of World War II, people of German descent who lived in Eastern European countries were sent back to Germany, no matter how many generations their families had been in the East. The new government of West Germany had to absorb 10 to 12 million of these refugee resettlers. And hiding away in Heifer's archives

were many of their stories. It was largely to these resettlers that the Heifer Project cattle were sent.

The boxes I found held lists of donors and recipients for all the shipments, as well as photos of and letters from recipients telling of the often traumatic hardships they had endured and how important their heifer was to them in their recovery. A rich motherlode, to be sure, that helped round out the Heifer story and became more valuable to me than I could have imagined.

In September 2013, I had the opportunity to travel to Germany and Poland. With the lists of recipients from Heifer's archives and the help of German friends, I was able to find and meet with

Section

ment or private individuals. Though the U.S. State Department paid ocean feed costs for animals to West Germany until January 1955, the Germans now take that responsibility. They assumed ocean travel costs just last June.

Before distribution in West Germany all animals are required to undergo two weeks of quarantine tests and inoculations.

Decision on distribution to individuals made by local government and church officials working in cooperation with Heifer Project representatives.

In Germany, Heifer Project Incorporated directed through the Brethren Service Commission of the Church of the Brethren, additional aid is given through the cooperation of the Evangelical and Reformed Church and the Mennonite Central Committee. At present, however, only Church of the Brethren representatives are actively working with the project.

Traveling from their "Brethren Haus" headquarters in war-torn Kassel in Central Germany, Heifer Project men confer with representatives of German Catholic, Protestant welfare organizations and governmental ministries from each of the Federal Republic's states to supervise selection and distribution of heifers donated to refugee farmers.

There are four requirements for families receiving a Heifer Incorporated animal in Germany:

- Each recipient must be a refugee.
- Each must have been a farmer and at present be starting again at farming.
- Each must have a definite need for help in new start, having no other cows.
- Finally, each must sign an agreement regarding the first-born female calf to assure refugee farmer at no expense to receiver.

Thus, while Heifer Incorporated has distributed some 2,880 cows in West Germany since 1949, the number of descendants from those animals redistributed under the rules of the original gift clause number in the tens of thousands.

Records for Church of the Brethren work are kept only of the cows sent directly from the States. A map showing location of the cattle is half a wall in the Brethren Haus.



A German recipient family leads their cow home after a dedication service where the heifers were distributed.



Mr. and Mrs. Alois Oelhorn receive Miss Charity, the 2,000th heifer sent to Germany by the Heifer Project, as a gift from the McPherson, Kansas, Rotary Club in May 1955.



A German refugee farmer draws a number out of a hat at an April 1952 distribution ceremony to see which heifer will be his.



The Hermann Deppe family of the Reichswald settlement stand with their beloved heifer received in 1950.

members of 11 families from the Reichswald resettlement in Germany where 42 heifers had been placed in 1950. What a phenomenal experience! Not only for me, but for them as well, as they were finally able to say thank you to someone for this gift of a heifer at a critical point in their lives.

I pass the recipients' gratitude on to those whose families were involved in donating heifers to Germany. Marianne Queling Arts summed up the difference this gift of a heifer meant to her family, which had been run out of their village in Silesia where her father had been mayor. She said, "Our heifer lifted us

There is power in story, and Heifer has a rich history that needs to be told.

from the depths of despair and gave us hope." In Poland, I heard a similar message from a family there who received a heifer in late 1945. These contacts would not have been possible without the records from the Heifer archives.

So why do I do what I do? Because this history has claimed me, and I cannot do otherwise. There is power in story, and Heifer has a rich history that needs to be told. ■



Miller spends hours poring over documents.



Clay Water

Finding Inspiration From Entrepreneurs

Reviewed by Bethany Ivie, *World Ark* contributor

Can I get real with you for a minute? I'm intimidated by the success of others. Don't get me wrong, I like to hear stories about people working to change the world for the better, but I get uncomfortable when people I don't know start to list their achievements. As a person who considers it an accomplishment to get to work on time, listening to a stranger humble-brag about how she did the coolest thing ever can be a little demoralizing. When I started reading Jessica Jackley's book *Clay Water Brick*, I was nervous that it would be just that — a tally of really impressive achievements that would (unintentionally) make me feel kind of bad about myself.

(also known as Oprah).

Though *Clay Water Brick* is autobiographical, its aim is really to highlight entrepreneurs. Jackley's definition of the word was a new one for me. As she defines them, entrepreneurs are people who refuse to be held back by what they do not have. Instead of giving up when faced with challenges, entrepreneurs make a series of choices to move forward "regardless of what they lack or must fight against." She shares her own experience as an entrepreneur with complete transparency. Refreshingly, Jackley didn't emerge from college groomed to co-found a successful start up. She emerged, like most recent grads, passionate but unsure of what to do to make her goals

As she defines them, entrepreneurs are people who refuse to be held back by what they do not have. Instead of giving up when faced with challenges, entrepreneurs make a series of choices to move forward "regardless of what they lack or must fight against."

The thing is, if anyone did have an excuse to brag, it would be Jessica Jackley. She is most well known as the co-founder of Kiva, an organization that harnesses the power of lending to fight poverty. Jackley's other ventures have included earning an MBA from the Stanford Graduate School of Business and co-founding ProFounder, a first-of-its-kind crowdfunding platform. She has even had a successful audience with "The Queen"

happen. She is brutally honest about the struggles and mistakes that she experienced in the process of founding and operating Kiva and ProFounder, as well as the lessons she learned along the way. I genuinely appreciated her candor.

Alongside the stories from her own life, Jackley also shares the stories of some of the rural entrepreneurs that she has met around the world, including Patrick the brick

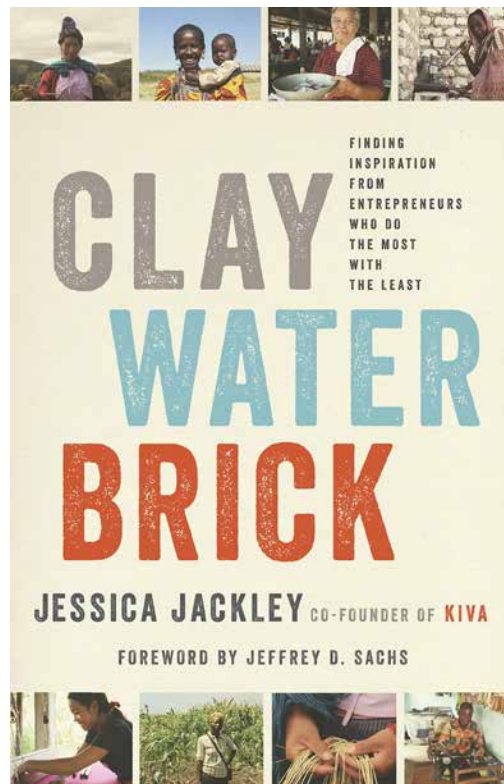


Brick:

Who Do the Most With the Least

maker in Uganda, Blessing the shopkeeper in Tanzania and Constance the banana farmer in Kenya, to name a few. Jackley deftly uses these stories to point out the parallels among these entrepreneurs, herself and her readers. She has a talent for finding universal lessons in situations that seem radically different from one another. How are Patrick the brick maker and I similar? We both have to start where we are if we want to succeed in whatever goals we have. I loved that Jackley communicated that; regardless of how different our situations are, we as people have something in common and are all learning similar lessons. We're all working toward something.

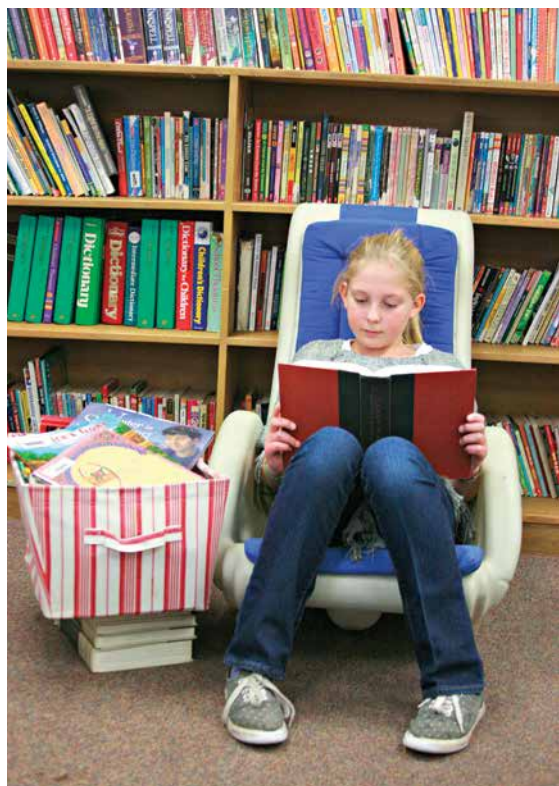
Despite my initial (slightly dramatic) misgivings, I recommend this book. I finished it feeling refreshed and not belittled or talked down to. I was surprised by it. I think you'll be surprised by it, too. It's full of encouraging, applicable advice from a fresh perspective that will leave you feeling empowered and ready to take on a dream project of your own. At the very least, *Clay Water Brick* can offer you a chance to sit back and allow yourself to be impressed by the tenacity of Jessica Jackley and her fellow entrepreneurs. They're worthy of admiration! ■



*Clay Water Brick: Finding Inspiration from
Entrepreneurs Who Do the Most with the Least*

By Jessica Jackley

Hardcover, \$28; 224 pages



READ TO FEED

"Read to Feed means to me that there are kids across the world just like me who don't have enough food, clean water, nice clothes and shoes, homes or schools. Read to Feed means to me that I can make a big difference just by reading for a couple of hours and asking for a little bit of money. That's nothing compared to what some kids have to go through. Read to Feed means to me that I can help them. We can help them. Read to Feed means to me that we can change the world."

AUBREY JOHNSON

5th grade

Osceola Intermediate School

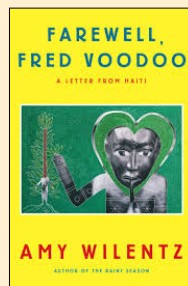
Osceola, Wisconsin

LEARN MORE AT WWW.READTOFEED.ORG

FOUR FAVORITES ON:

Haiti

To visit Haiti is to forever fall into its thrall. Once called "The Pearl of the Antilles" for its lush forests and natural beauty, this Caribbean island nation long ago lost most of its forests in pursuit of farmland and charcoal. While the country continues to struggle with poverty and environmental degradation, Haiti's brawny history, colorful folklore and enigmatic politics make it a fascinating place to study and visit.

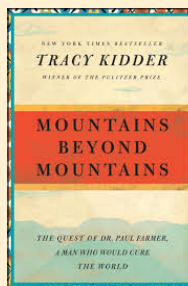
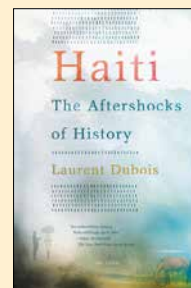


Farewell, Fred Voodoo

By Amy Wilentz

Haiti: The Aftershocks of History

By Laurent Dubois

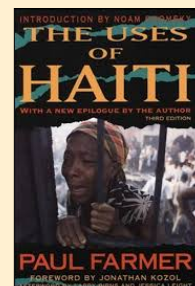


Mountains Beyond Mountains

By Tracy Kidder

The Uses of Haiti

By Paul Farmer



Heifer International

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TO
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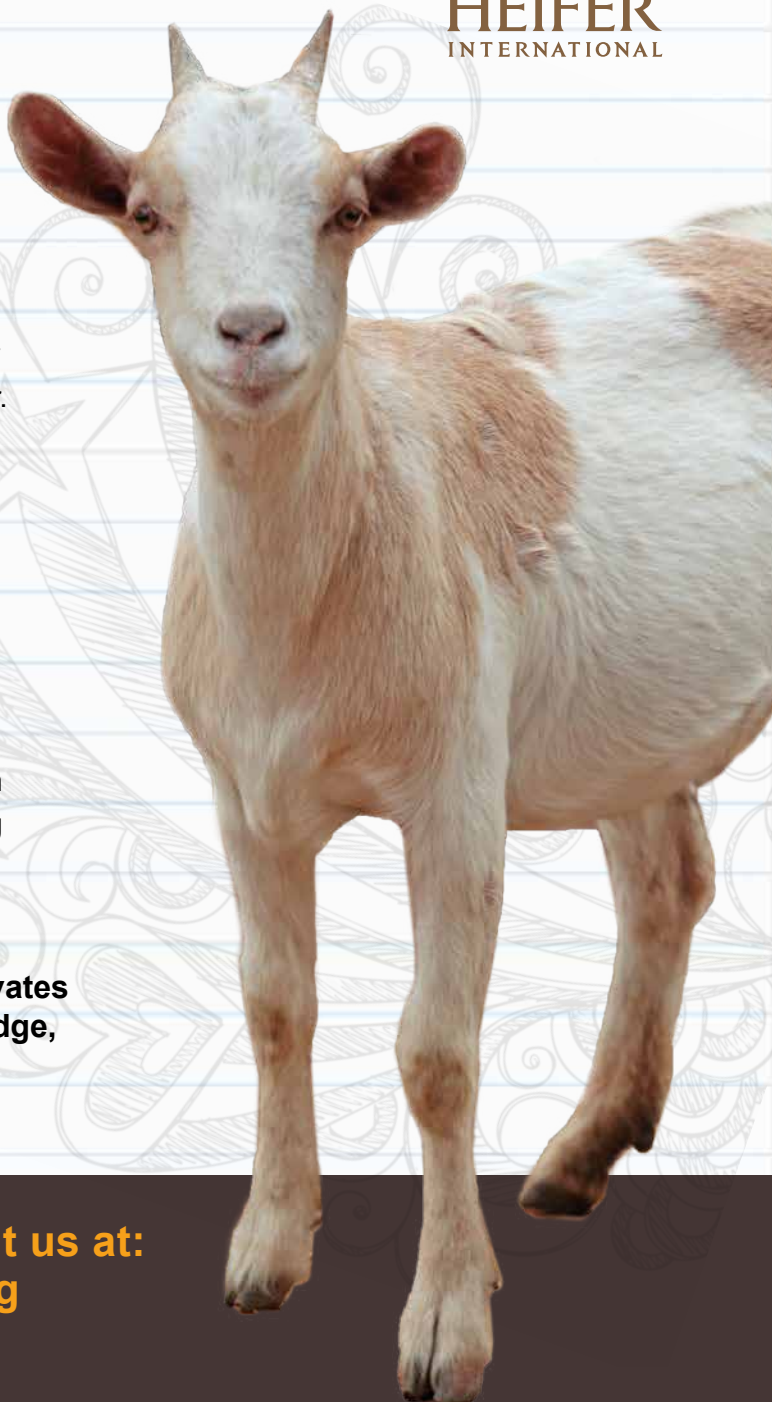


One generous Heifer International fan wants to encourage more students to participate in Read to Feed this spring by offering to MATCH each dollar your students raise with an additional dollar. That means each gift your classroom gives will have TWICE the impact. But hurry. Matching funds are limited and only the first \$50,000 in Read to Feed donations that we receive will be eligible to be matched.

Read to Feed inspires your students to change the world. Don't miss out on this opportunity to bolster their reading skills while helping families in need.

"A teacher is a compass that activates the magnets of curiosity, knowledge, and wisdom in the pupils."

— EVER GARRISON



Call 877.275.READ or visit us at:
www.readtofeed.org

#readtofeed



Heifer Fashion

Alpaca Artisans in Peru Show

Story by Jason Woods, World Ark Senior Editor | Photos by Oscar Aragon



Models at a fashion expo in Cuzco, Peru, use accessories created by Heifer project participants.

Cuzco, Peru – Handmade met high fashion when artisans from the remote highlands unveiled some of their latest creations at a fashion show in one of Peru's most stylish cities. The roughly 200 women from the groups Tres Alpaquitas and Ausangate Away raise their own alpacas and spin the animals' luxe fiber into scarves, gloves, handbags and other creations.

Heifer International Peru is helping the artisan groups get a better price for the handicrafts and yarn they sell by improving the quality of their alpaca herds and providing equipment and training.

Their creations caught the eye of the Regional

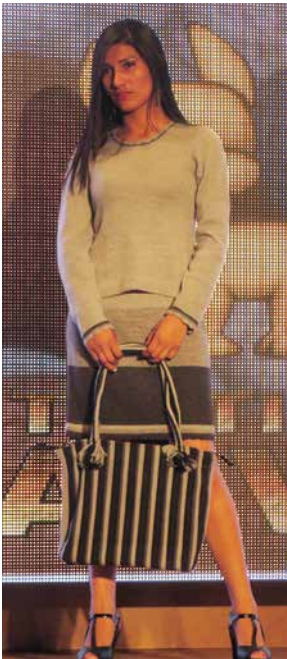
Directorate of Foreign Trade and Tourism, landing the women's groups a chance to display their pieces at an expo aimed at boosting sales beyond the Peruvian border. Professional models sported handknit bags, hats and gloves crafted by Tres Alpaquitas and Ausangate Away members, who support their families largely through the sale of their work.

For more information, you can visit tresalpaquitas.com and ausangateaway.com, or find them on Facebook. If you're in Cuzco, visit the groups' store at Calle San Agustín 415-A. ■



Hits the Catwalk

Off Their Handiwork



Artisans from the Peruvian highlands are branching out from traditional designs to try their hand at modern fashions.

SHOP @heifer



◀ EMBROIDERED BALL CAP

I \$17 EACH

Show your Heifer spirit with one of our embroidered ball caps, perfect for a fun day out with the family. Available in navy and green colors, one size fits all.

NCAPNAVY Navy
NCAPGREEN Green

▶ HEIFER NOTECARDS I \$11

Join Heifer in celebrating over 70 years of work with notecard sets featuring Life Changing Animals. The set contains eight beautiful photographs printed in sets of two on 16 blank cards with 16 corresponding blank envelopes. Cards measure 5-1/2" x 4-1/4"

NANIMALFY16



▲ JUMPING COW PJ PANTS I \$23.99

Counting jumping cows while wearing these cozy flannel pajama pants makes for a great night's sleep every time. Unisex, S-XXL.

NPJSBLACK Black
NPJSPURPLE Purple



Hang in there!



Wish you were here.



Missing Ewe!



Thinking of you.



All "kidding" aside.
Happy Birthday.

◀ HEIFER GREETING CARDS I \$13

Have something to say? Say it with these adorable baby Heifer animals! This set of 20 cards and 22 matching envelopes features five different animals with five encouraging messages, such as "Hang in there!" and "Missing Ewe!"

69.NGRTCDFY15

▶ HEIFER CHARM BRACELET I \$16

Layering bracelet or single strand necklace measuring 26 inches. Features a charm with the Heifer jumping cow. Handmade by a women's group in India. Available in teal color.

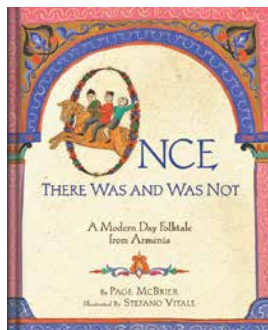
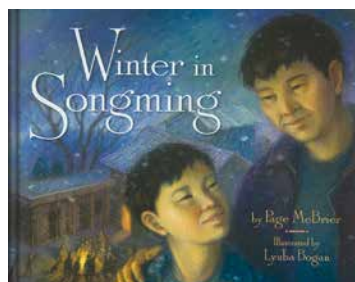
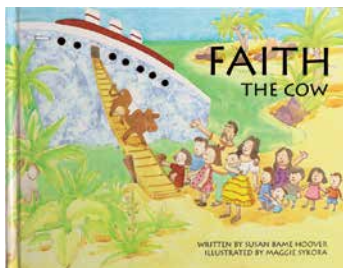
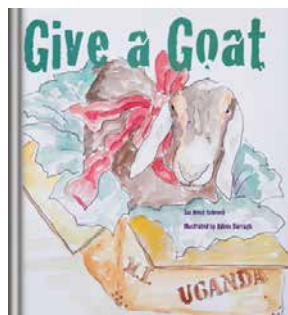
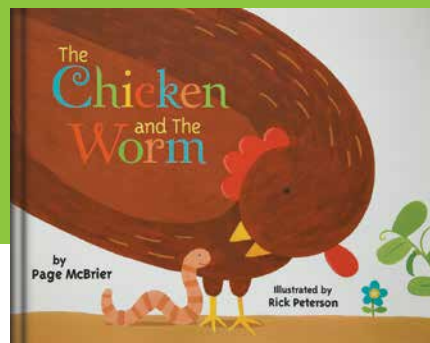
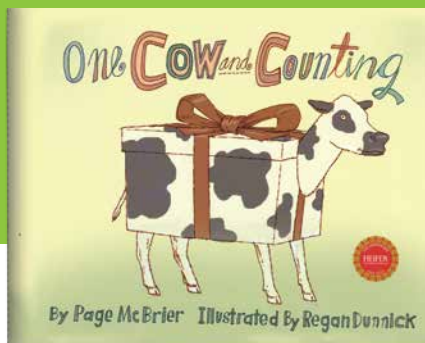
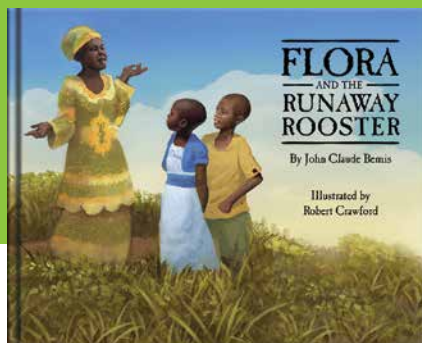
NBRACL16TL



◀ HEIFER GROCERY BAG I \$15

Show everyone you're serious about caring for the Earth and sustainability when you take these reusable totes on your next shopping trip.

NBGUORCHID Orchid
NBGBLUE Blue



▲ **FLORA AND THE RUNAWAY ROOSTER** | \$10

Young Flora dreams of going to school with her brother and sister so she can play soccer. But when one of her family's roosters Kubika runs loose, he leads Flora on an adventure. Along the way she learns the value of friendship, responsibility and Passing on the Gift. Written by John Claude Bemis. Illustrated by Robert Crawford. **NBFLORAFY15** Hardcover

▲ **ONE COW AND COUNTING** | \$10

A creative, quirky and humorous children's book that illuminates the wondrous benefits of cows, goats, water buffalo and more. For 3rd grade and older. **NBCOWHB** Hardcover

▲ **THE CHICKEN AND THE WORM** | \$10

Introduces the idea that even the smallest creatures can work together to care for the Earth. Pre-K and K. **NB07070HB** Hardcover

◀ **GIVE A GOAT** | \$5

The true story of how one 5th grade class was inspired by *Beatrice's Goat* and raised money to send even more animals to struggling families around the world. **NBGAGPB** Paperback

◀ **FAITH THE COW** | \$10

Chronicles the first shipment of Heifer cows to Puerto Rico. For ages 4 to 6. **NB0705000** Hardcover

◀ **WINTER IN SONGMING** | \$10

Follow a boy taking his first step into manhood while his village takes a step toward self-sufficiency. For 3rd and 4th grades. **NB07180HB** Hardcover

◀ **ONCE THERE WAS AND WAS NOT: A MODERN DAY FOLKTALE FROM ARMENIA** | \$10

A true story of three boys who joined a Heifer International-sponsored youth group in Armenia and learned to raise cows. For 5th and 6th grades. **NB07090HB** Hardcover

▶ **HEIFER WINDOW DECAL** | \$2

Show your support and spark conversation with this attractive, weather-resistant vinyl decal. White color, 5 inches x 3.5 inches. **ND0005**



▲ **HEIFER MUGS** | \$8

Keep your coffee warm and your heart warmer with these lovely ceramic mugs featuring Heifer's logo. Microwave and dishwasher safe. 14oz.

NCERMUGBLU Dark Blue with Light Blue Interior

NCERMUGORG Orange with Yellow Interior

NCERMUGGRN Dark Green with Light Green Interior



▲ **BAMBOO UTENSIL SETS** | \$15

Eat on the go? This set of reusable utensils is a great way to reduce your footprint.

NTOGOPUMP PUMPKIN

NTOGOIND INDIGO BLUE

NTOGOMUL MULBERRY

▲ **HEIFER WATER BOTTLE** | \$9

Help keep trash to a minimum when you choose to carry this 16-ounce aluminum water bottle with carabiner top featuring Heifer's logo.

NWTRBTL15

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INTERNATIONAL



PHOTO BY LACEY WEST

"I want to make enough progress to fly with our own wings as a community. We don't want to be helped all the time."

Benita St. Louis

A mother of two, Benita St. Louis used to sell goats and get loans to pay her sons' school fees. In 1995, she joined a Heifer-supported women's group that produces jellies, chocolate and other locally grown foods for retail sale. St. Louis now pays the school fees herself, keeping her goats as an emergency fund. She looks forward to the day her family and community outgrow the need for aid.

LEAVE IT BETTER THAN YOU FOUND IT




Gifts to our general endowment grow over time, providing long-term support for our proven approach to ending hunger and caring for the Earth. To find out how to create a living legacy that will effect positive change for generations to come, visit www.HeiferFoundation.org or call 888.422.1161.





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FRIENDS OF HEIFER

A PERFECT PARTNERSHIP

Heifer International needs caring supporters to join a critically important group we call Friends of Heifer®. Friends of Heifer send a regular contribution each month that generates a steady, reliable stream of support so we can deliver animals, training and hope to families in need around the world.

For just a few dollars a month, you can provide these families with heifers, goats, sheep and other livestock that produce nutritious milk and cheese, wool, eggs and draft power. This increases income available for medicine and school fees and enables families to lift themselves out of poverty. All you have to do is sign up, and we'll take care of the rest!

MONTHLY SUPPORT | LIFETIME BENEFITS

**Call us at 888.5HUNGER or
visit www.heifer.org/monthly**

To join Friends of Heifer, you can also use
the envelope between pages 26 and 27.


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of Heifer®*