

# This document is discoverable and free to researchers across the globe due to the work of AgEcon Search. 

## Help ensure our sustainability. Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from AgEcon Search may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.



This report presents an in-depth look at the enormous impact ag co-ops have on the nation's economy. The sector-by-sector analysis and trends tracked can be used by co-op managers and directors to gauge the performance of their operations.
$\square$ For a free hard copy, send e-mail to: coopinfo@wdc.usda.gov, or call (202) 720-7395, or write to: USDA Co-op Info., Stop 3254, 1400 Independence Ave. SW, Washington, DC 20250. Please indicate title of report and number of copies needed.

- To download from the internet, visit: www.rd.usda.gov/publications/publications-cooperatives.

For a free electronic subscription to USDA's Rural Cooperatives magazine, please go to:
http://www.rdlist.sc.egov.usda.gov/listserv/mainservlet.
Send hard copy subscription requests to:
coopinfo@wdc.usda.gov.

## Volume 84, Number 2

March/April 2017
Rural Cooperatives (1088-8845) is published bimonthly by USDA Rural Development, 1400 Independence Ave. SW, Stop 3254, Washington, DC. 20250-0705.

The Secretary of Agriculture has determined that publication of this periodical is necessary in the transaction of public business required by law of the Department. Periodicals postage paid at Washington, DC. and additional mailing offices. Copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, DC, 20402, at $\$ 23$ per year. Postmaster: send address change to: Rural Cooperatives, USDA/RBS, Stop 3254, Wash., DC 20250-3255.

Mention in Rural Cooperatives of company and brand names does not signify endorsement over other companies' products and services.

Unless otherwise stated, articles in this publication are not copyrighted and may be reprinted freely. Any opinions express-ed are those of the writers, and do not necessarily reflect those of USDA or its employees.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident. Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 6329992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.

United Staters
Department of Agriculture

Dan Campbell, Editor
Stephen Hall / KOTA, Design
Have a cooperative-related question? Call (202) 7206483, or email: coopinfo@wdc.usda.gov

This publication was printed with vegetable oil-based ink.

## Features



## 4 Co-ops Help Members Adapt

Advanced agronomy programs can help farmers gain efficiency through cutting-edge technology
By 7ulie A. Hogeland

## 8 'Failure Is Not an Option'

Florida's Natural, citrus industry taking bold steps to help growers fight devastating disease
By Dan Campbell

## 23 Expertise Is Essential

Deciding who will conduct a co-op feasibility study is a crucial decision By James Wadsworth

## Departments

## 14 LEGAL CORNER

17 MANAGEMENT TIP
20 In the spotlight
26 newsline

ON THE COVER: Citrus greening disease has severely reduced Florida's orange harvest during the past decade. The state's largest growers' cooperative is helping its members fight back by offering to subsidize the cost of replanting orange groves. See page 8. Photo courtesy Florida's Natural Cooperative


##  Membes 4 tap

##  ctin halp Tamers gairectiaith throunh ratitiju edig tednal cifi

By Julie A. Hogeland, Ag Economist USDA Rural Development Email: Julie.Hogeland@wdc.usda.gov



Co-ops exist to serve members, often by anticipating and addressing farmer problems before they become overwhelming. In recent years, farmers have been forced to deal with unusually severe weather patterns such as droughts. While a severe, extended drought in California has been much in the news in recent years - until heavy precipitation fell this winter - drought
has also impacted growers in other regions.

Nearly half of Ohio suffered some level of drought last summer, while about 17 percent of Michigan had to deal with "peak drought" conditions last year - and this even after the two states received above-average precipitation for all but one month from December 2015 to March 2016. Other areas have had to deal with the opposite problem: too much moisture, including severe flooding.

Increased weather variability and severity has generally fallen short of what many farmers would consider full-
blown climate change. Nevertheless, prolonged heavy rainfall suggests to 6070 percent of Midwestern farmers that "something is going on," says Dennis Todey, director of USDA's Midwest Climate Hub.

Are these extreme shifts in weather patterns the "new norm," or a temporary phase? Regardless, farmers must deal with the weather conditions Mother Nature tosses at them.

Using advanced agri-science and technology to adapt farming practices may be a farmer's best weapons in this battle. This article examines how one of the nation's leading farmer co-ops

works in tandem with locally owned cooperatives to help members do just that.

## Land O'Lakes SUSTAIN program goal: better choices

Land O' Lakes - the nation's third largest agricultural co-op, best known for its dairy foods and farm supply/agronomy services - launched the Land O'Lakes SUSTAIN program in 2012 to help producers make better crop and nutrient choices. This national program was developed in partnership with the Environmental Defense Fund (EDF). EDF is a nongovernmental

Growers who enroll in the Land 0' Lakes SUSTAIN program benefit from technologically advanced analytic tools to help bolster crop yields, even in challenging conditions, while also reducing the impact of farming operations on the environment. Photos courtesy Land O' Lakes
conservation organization with expertise in collaborative solutions to many of today's sustainability issues.

The Land O'Lakes SUSTAIN platform uses advanced technology, including WinField United R7, a software platform that helps producers
customized approach to help farmers offset the risk of crop selection and production through the use of state-of-the-art, precision agriculture. Many ecologists now regard "bottom-up, decentralized" approaches to dealing with changing climate patterns as a more promising route to helping farmers and communities adapt, as opposed to globally coordinated actions that increasingly appear to be unattainable.

Moreover, by rectifying the natural imbalances of key soil nutrients, Land

## Using advanced agri-science and technology to adapt farming practices may be a farmer's best means of adapting to extreme weather variability.

identify hybrid crop varieties that tolerate certain growing constraints, such as dampness or drought, and which will grow well in their local area. Winfield United is the crop inputs division of Land O' Lakes Inc.
"What really matters to farmers is how a specific crop does locally," says Todey. Even crop varieties that may thrive 40 to 50 miles away may not be suited for a member's local growing conditions, he notes.

The Land O'Lakes SUSTAIN platform demonstrates co-op readiness to "make things happen." The platform was designed on the heels of predictions that, to manage weather transitions, farmers will increasingly rely on supplier and manufacturer recommendations for crops, pest management and other management practices. As agriculture shifts to employing more "client-based" research, recommendations need to be more precise and tailored to individual decisionmakers, according to many ag economists (Reilly, 2011).

Based on these criteria, Land O'Lakes SUSTAIN hits all the bases: it is a locally oriented, decentralized and

O'Lakes SUSTAIN also contributes toward land stewardship and soil health, something valued throughout the foodsupply chain and by growing numbers of consumers.

## How Land O' Lakes SUSTAIN works

The process can start with using the R7 tool; farmer-owners of a local cooperative begin the agronomic process by dividing their fields into 2.5acre grids, then taking soil samples within each grid. Using geo-spatial software processes, the cooperative analyzes the soil samples to determine the variability of soil nutrient levels.

The cooperative then makes nutrient recommendations for lime (needed to correct soil pH levels), phosphorus and potassium. These recommendations are often less than what a farmer historically will put on a field in a "flatrate application" management strategy. Using spreaders equipped with sitespecific technology, the cooperative can then apply the right amount of nutrients in the right spots. This enables farmers to maintain adequate nutrient levels and to achieve optimum
production from each field.
The R7 tool of WinField United combines satellite imagery data that indicate high- and low-yield areas, along with physical measures of biomass variability. Ecologists define biomass as the amount of living matter in a given habitat, expressed as the weight of organisms per unit area.

R7 can also accommodate historical yield data and other managerial variables, such as multi-year field zones. R 7 is used to make recommendations for seed populations and nutrients

SUSTAIN platform is a farmmanagement program that gives producers information that will help them make better crop and input decisions. Weather trends are a factor in these decisions, but not the primary focus. Rather, incorporating technology like the R7 tool allows producers to practice stewardship in the form of the careful use of limited or costly resources, including money, soil, seed and nutrients.

Moreover, by adding nutrients or chemicals based on scientific diagnosis
adaptively manage or respond to new weather events: (1) learn by trial and error; (2) build on incremental changes and (3) learn from each other. Getting farmers thinking and talking about the challenges of weather variability can engage them in a creative, problemsolving capacity that can strengthen their skill in decisionmaking (Arbuckle Jr. et al., 2014). Such skills will be critically important insofar as continued problematic weather fosters further uncertainty, causing farmers to reevaluate past management decisions and

# The term "stewardship" resonates with farmers more strongly than does "sustainability." Stewardship represents a long-held, culturally endorsed agrarian value with positive associations for farmers. 

based on potential productivity of each zone within a field. Applying seed and nutrients in the right amount and at the right rate for each area enables each zone to work at its own potential, instead of putting too much or too little seed and fertilizer in the field.

This process gives nature what it needs - the basis of the continuous upkeep required for good stewardship - and farmers optimize their productivity and efficiency through advanced agronomic technology.

Knowing soil potential and requirements is half the equation. The other half is choosing the right seed and using the placement rate derived from grid sampling. This knowledge improves farmer return on investment. After all, why should farmers risk paying for resources that are vulnerable to run-off?

Hybrid performance data used in the R7 tool come from cross-country test plots (called "Answer Plots®") established by WinField United. Answer Plots represent both widely varying and finely nuanced field conditions for the corn and soybeans integral to Corn Belt agriculture.

Fundamentally, the Land O'Lakes


The R-7 tool of Winfield United (the crop inputs division of Land $0^{\prime}$ Lakes) uses satellite imagery data that identify high- and low-yield production areas while also measuring biomass variability.
of soil content, the soil is brought to an optimum state, helping to ensure it will be a resource for future generations.

## Engaging producers as problem solvers

In an era of severe and unpredictable weather, ecologists recommend three ways communities and producers can
seek new information and strategies.
In this context, the term "climate change" may be less helpful in working with farmers than would terminology and narratives that focus on adaptation to severe weather events. Terms such as "weather variability" and "extreme weather" will likely resonate with a greater proportion of farmers (Arbuckle et al., 2014).

## Importance of stewardship

Likewise, the term "stewardship" will probably resonate more with producers than "sustainability." Put simply, "sustainability" does not have the track record of rich, evocative meaning associated with the term "stewardship." From the time of Thomas Jefferson, the concept of stewardship has been associated with the honorable tasks of producing food and fiber.

In that sense, stewardship represents a long-held, culturally endorsed agrarian value with positive associations for farmers. That positive association presumably makes "stewardship" a more potent, effective term than "sustainability" in helping farmers construct an identity (or the way they see themselves) appropriate to
contemporary challenges.
Craig Houin of Sunrise Cooperative, a leading ag and energy cooperative in Ohio, leads the co-op's Sunrise Data Innovation and R7 program. He observes that retailers need to understand how to handle the concept of stewardship more appropriately (i.e., sensitively) because it impacts livelihoods and community. Stewardship is the core focus and
emphasizing the uncertainty and complexity associated with severe weather events (Fleming et al, 2014). Too much uncertainty raises the question of whether people are doing what they should be doing. The alternative to uncertainty might be a check-list or agenda of what should be done.

This approach risks putting farmers into the role of passive recipients rather


Growers attend field-day trials to keep abreast of advances in new plant varieties and treatment strategies.

## initiative of the Land O'Lakes

 SUSTAIN program, says Houin.What does "sustainability" mean? Indications are that, as it is presently used, the term "sustainability" has not yet attained a well-defined, stable meaning.

At the 2011 annual meeting of the Harvard Business School, professors who were looking at everyday language for newly influential terms noted that "sustainability" would probably have a different meaning in the next five years. More recently, Houin notes that farmers attending a meeting of young producers questioned what "sustainability" meant.

The way people in agriculture talk about weather variability - what some call "the discourse of climate change" - has been criticized for over-
than being actively engaged, entrepreneurial problem-solvers. On the other hand, too much complexity implies that more science is probably required before individuals can be expected to act.

The term "sustainability" is a relatively new agricultural term which has, to some degree, been associated with climate change implications and meanings, and so may encompass some of the same uncertainty. The terms "sustainability" and "climate change" (or variability) may be problematic insofar as they raise more questions than they answer. Asking farmers how they define sustainability and weather variability - what does it mean to them? - may be useful to ensure that co-op and farmer-member are on the same page.

What is clear is that good stewardship involves making a commitment to soil health. This involves improving managerial practices via improving decisionmaking and efficiency, etc. Utilizing innovations such as variable-rate application, lime application, cover crops and reduced tillage - are an important part of this commitment.

## Why a cooperative?

Sunrise Cooperative, Land O'LakesSUSTAIN and Winfield United represent a new, fluid and evolving business relationship to identify what farmers need and how it should be packaged and delivered.

Houin says co-op affiliation matters because agriculture encompasses many deep-rooted relationships. Business relationships can often become personal relationships, with bonds of trust forged between a co-op representative and the farmer-member. A co-op identity signals that the organization is owned by farmers and therefore is motivated to improve performance on their behalf. This has reciprocal benefits: knowing farmer preferences conceivably reduces the cooperative's cost to serve.

The Land O'Lakes SUSTAIN platform demonstrates how cooperatives are uniquely positioned to help their members adapt and succeed, regardless of whether challenges are environmental or market based.

## Selected References

- Arbuckle Jr., J.G., Hobbs, A. Loy, Morton, L.W., Prokopy, L.S. and J. Tyndall (2014). "Understanding Corn Belt farmer perspectives on climate change to inform engagement strategies for adaptation and mitigation." Fournal of Soil and Water Conservation, Nov/Dec, 505-515.
- Fleming, A., Vanclay, F., Hiller, C. et al. (2014). "Challenging dominant discourses of climate change." Climatic Change 127: 407-418.
- Reilly, J.M. (2011). "Overview: Climate Change Adaptation in the Agricultural Sector" in Climate Change Adaptation in Developed Nations. Stuttgart: Springer.
- Reilly, J. and D. Schimmelpfenning (2000).
"Irreversibility, Uncertainty, and Learning: Portraits of Adaptation to Long-Term Climate Change." Climatic Cbange 45: 253-278.


> Florida's Natural, citrus industry taking bold steps to help growers fight devastating
> disease

By Dan Campbell, editor
dan.campbell@wdc.usda.gov


Florida citrus growers who survived 2004 when the state was pummeled by three consecutive hurricanes - could be excused for believing they had taken the worst hit Mother Nature could deliver and still bounce back. Hurricane Charley that year alone caused 24 deaths and inflicted \$2.2 billion in damage to the state's agriculture industry, of which citrus is king.
"Charley came in on the Gulf side; went right up the Peace River Valley, through the heart of citrus country," recalls William McMullen, a member of Florida's Citrus World Cooperative (more commonly known as Florida's Natural, the co-op's popular juice brand). "Trees were twisted and tossed about like matchsticks." What had been shaping up as a banner year became a disaster.

But even that calamitous year, as well as periodic "freeze years," must take a back seat to the devastation unleashed on the orange crop by huanglongbing (HLB) disease, more commonly called citrus greening disease. Citrus greening, first detected in Florida in 2005, is spread by a tiny insect - the Asian citrus psyllid.

Although the psyllid was present in Florida in the late 1990s, citrus greening most likely came into the state via the Port of Miami. Since then, citrus greening disease, a bacterial disease spread by the psyllid when it feeds on citrus leaves, has severely reduced the orange crop.
"At least we knew that 2004 was a once-in-100-years occurrence," says McMullen, who grows several hundred acres of oranges in Polk County, southwest of Orlando. "You repair damage, you replant, you come back. There is no cure yet for this disease," which causes fruit to be misshapen and to drop well before maturing
(when still green).
"Citrus greening is a double whammy," McMullen continues. "It has cut my crop by about 50 percent while my production cost has nearly doubled" (due to extra horticultural actions necessary to mitigate some of the impacts of the disease).

Frank Hunt III, president of Hunt Bros. Cooperative, has been fighting the disease with more frequent, small
in the southwest part of the state that have been far less impacted.

Hundreds of millions of dollars have been spent on research since 2005, but the unrelenting march of citrus greening has continued. In 2004, Florida produced 240 million boxes of oranges, about 95 percent of which go to juice. This year, the current crop estimate is 70 million boxes, but is likely to be reduced further before
producing states. But the hot, humid climate and geographic concentration of the state's citrus industry have combined to make Florida ground zero in the battle with the psyllid.

## Horticultural steps help

Researchers are working feverishly to breed disease-resistant or -tolerant tree varieties and rootstocks, as well as to develop other crop protectant "tools"


Frank Hunt III has cleared 600 acres of diseased trees and is replanting with high-density groves of 200 to 270 trees per acre to help offset the impact of citrus greening disease. Opposite page: Citrus greening disease prevents fruit from maturing; it stays green and drops prematurely. Photos courtesy Florida's Natural, except where noted.
nutritional feedings and irrigations to help strengthen the trees' roots. Still, he has seen production plunge by about 70 percent in his groves on "The Ridge," a higher elevation growing area that runs down the center of the state and is known for its very sandy soil.

While these steps help slow the progression of the disease, they won't stop it.
"We've had to push [clear trees from] about 600 acres," Hunt says. Fortunately, he also has orange groves
season's end. Citrus canker and some other diseases are causing some of the loss, but citrus greening is overwhelmingly the biggest culprit.

One recent headline blared: "How long can Florida's citrus industry survive?" Other media coverage has focused on the possible need for alternative crops if commercial citrus is in a death spiral.

Citrus greening is also now present, to a far less extent, in California and Texas, the nation's other primary citrus-
(see sidebar, page 11).
Meanwhile, the good news is that some industry leaders - including Bob Behr, CEO of Florida's Natural think the crop "may have hit bottom this year and begun to rebound."
"It used to be that once a tree was infected, a grower would have to push the tree and replant," Behr says. "Now we are learning to live with the disease, which means focusing on better root health to allow the tree to thrive within a citrus greening environment. It won't
produce as much fruit as a healthy tree, but if a grower is willing to spend some extra money on care, the tree will still produce good fruit."

Advanced irrigation systems can help get more nutrients and water directly to a tree's root zone. Hence, the state of Florida will pay up to 75 percent of the cost for installing micro-jet or drip irrigation systems. These systems also conserve water by reducing runoff and evaporation, and can play a big role in freeze protection.

Citrus also recently became eligible for USDA's Tree Assistance Program (TAP), a disaster-relief program administered by USDA's Farm and Foreign Agricultural Services mission area (FFAS).

It's not just farmers whose future is at stake - much of rural Florida's fate hangs in the balance. Citrus creates 62,000 direct jobs and many more indirect jobs in Florida, and it is the life blood of many rural towns in the state's interior.
headquarters building to fund its operations during the crisis.
"There's no way we could raise the fee on growers who are fighting for their lives," says Sparks. So the association has tightened its belt and continues to help lead the fight.

## Co-op support for replanting

When production drops below a certain point, trees and entire groves must be pushed and replanted. The cost of replanting when production is down

# "At least we knew that [three hurricanes in 2004] was a once-in-100-years occurrence. You repair damage, you replant, you come back. There is no cure yet for this disease." 

The ultimate weapon, however, will be disease-resistant trees. Behr says he is "cautiously optimistic that there will be one in the next 5 to 7 years," given the current rate of research progress.

Michael Sparks, CEO of Florida Citrus Mutual, a statewide trade association which does legislative and education work for the industry, shares that outlook. "We have 30 different field trials underway right now; progress is being made. So yes, I would say Bob Behr's estimate is right on the money. The crop will be smaller again this year than the year before, but not down by nearly as much as we have been experiencing," Sparks says.

Florida Citrus Mutual has successfully lobbied the state government for $\$ 225$ million for research and has teamed with similar citrus associations in California and Texas to get $\$ 400$ million in federal funding committed to the battle. Indeed, Sparks says if one adds up all the research dollars committed so far by growers, USDA and the states of Florida and California, among other sources, close to $\$ 1$ billion may have been devoted to fighting the disease.


William McMullen says he doesn't view the co-op's tree replanting program so much as a member-recruitment program as it is a way to help members boost productivity during a time of trouble.
"That is why failure is not an option," says Sparks.

Since his organization is funded by a per-box fee, Citrus Mutual has had to cut staff and facilities as the crop has diminished. It even had to sell it
so sharply is a hardship for growers. Indeed, there are an estimated 130,000 acres of "ghost orange groves" in Florida, meaning the owners have simply abandoned them. This is an industry problem, because these groves

## Researchers contend with 'worst-case' scenario

uring his career as a research scientist, Harold Browning says he has never before felt the kind of pressure he is experiencing now. "When you see growers going out of business due to citrus greening disease, as they are in Florida, with no end point yet in sight, you certainly do feel the urgency of the task," Browning says.
As chief operating officer of the Citrus Research Development Foundation (CRDF), Browning is responsible for helping to direct funding and coordinate research for a wide range of ongoing projects focused on everything from developing pheromone baits that can divert and trap the Asian citrus psyllid (ACP), to identifying insect predators to prey on it, to breeding disease-resistant trees.

A threat assessment done around 15 years ago looked at all the potential threats to the state's citrus industry, Browning recalls. The No. 1 threat was citrus greening disease.
"Not only are we facing an unprecedented disease, but one that comes with very few readily available solutions," Browning says. "This is probably the worst case one could imagine for an entire industry, as well for those of us who support it through research."

Considering how little was known about citrus greening when it hit here, Browning says he is pleased with the amount of research progress made in a short time.
"Prior to 2005, worldwide, very little had been published on the disease. Today, literally hundreds, perhaps thousands, of papers have been produced that lay down a foundation of knowledge about the interaction between the tree, the bacterial pathogen and the vector insect that carries it. We started with a black box; we have steadily been able to shine light into that box. But there are still things we don't know."

## Seeking long- and short-term solutions

Research projects range from short- to long-term. "Many short-term projects could be considered as a band aid, or therapy that prolongs the life of tree, but are not a cure," Browning says. "The other end of spectrum would be a fully resistant tree. Even if one is available in a few years, it could take 15 to 20 years before the majority of Florida citrus would be replanted and producing it."

So, short-term strategies are vital to the industry's immediate survival.
"We are well along the path on a wide range of solutions,"

Browning continues. "But how to do we turn newfound knowledge into solutions? We're maybe at the third lap of a mile run, with the endpoint not yet in sight."

CRDF was established in 2009 as a liaison between the citrus industry and the research community. Funding for research comes from the citrus industry and state and federal sources, including USDA.
"We solicit proposals and report on the results of research. We work with private companies and regulatory agencies, integrating teams to take research results and turn it into something that can be tested in the field, then be adopted by growers," Browning explains.

The original plan had been for CRDF to be an independent, corporate entity that would receive some support from the University of Florida (UF). It has since evolved into a Florida nonprofit that is affiliated with UF. In addition to research work being done at UF, CRDF has also directed research funds to the University of California, Texas A\&M, Penn State University and Cornell University, among others. "Whoever has the best ideas, we can fund their work," Browning says.

## Important role for co-op

Browning views Florida Natural's tree replanting program as "a very important companion to the research work being done" because it reduces the degree of risk growers face by reducing their cost of replanting. "It is a tribute to the co-op that it is jumping in and doing all it can to help growers."

Originally, it was felt that the industry could provide most of the needed research funds via an assessment on every box of citrus fruit grown in the state. "But as growers fail and the crop diminished, our resources faded," Browning explains. "So, in recent years we have had to reach out to the state legislature and USDA."

Several USDA agencies are providing funding and other types of assistance, including the Agricultural Research Service (ARS), the Animal and Plant Health Inspection Service (APHIS) and the National Institute of Food and Agriculture (NIFA), as well as research being done at USDA's horticultural lab in Fort Pierce, Fla., among other locations.
"There will probably never be one silver bullet [that cures the disease]," Browning says. "It's going to be an integrated management system that allows growers to stay in business, or return to business."

- By Dan Campbell
can become hot spots for hosting pests. Beyond that, these acres, as well as orchard land that has been cleared but is being left fallow, represent lost
cost of the tree plus some of their other replanting costs," says Hunt. The
money conveys as a loan from the co-op which, if the member agrees to extend
to the long-term survival of growers and the co-op," adds Behr. The program has proven to be very popular; already, more than 1 million orange


# "You bave to keep producing. The longer you wait on the sidelines, the harder it will be to get back into business." 

production the industry sorely needs to survive.

Florida's Natural has not only been playing an active role in educating members about ways to deal with the disease, but it has also taken bold action to get non-productive farmland producing oranges again.
"We were looking for ways to incentivize growers to get more land back into production," says Hunt, who is vice president of the Florida's Natural board. Hunt Bros. Cooperative is a local co-op primarily composed of members of the extended family. Hunt Bros., in turn, is a member of Florida's Natural, a 14-member, federated processing and marketing co-op comprised of local co-ops and a few large individual growers.

Co-op leaders studied the possibility of buying or planting its own groves to help supply the volume of oranges needed to keep its juice processing plant in Lake Wales, Fla., operating efficiently, Hunt notes. But because there was so much nonproductive acreage within the membership, the board and management decided the best course of action would be to provide incentives to members to replant. To do so, it established a $\$ 10$-million planting incentive program (PIP) to help subsidize the cost of replanting.
"We opted to pay growers $\$ 10$ per tree to replant - enough to cover the

trees have been replanted under it. The initial PIP offering has been so successful that a second $\$ 10$-million offering is now under serious consideration. McMullen says he doesn't see the replanting program so much as a member-recruitment effort - "because most growers tend to either be co-op people or not" - as it is a way to help members boost productivity in a time of trouble.

## 'Waiting it out' may prove fatal

Growers waiting on the sidelines for a disease-resistant orange variety before replanting are "gradually putting themselves out of business," Hunt says. "There will always be a better rootstock coming down the line. Meanwhile, you have to keep producing. The longer you wait on the sidelines, the harder it will be to

In an orange grove heavily infected with citrus greening disease, entomologists Matt Hentz (left) and David Hall, both of the USDA Agriculture Research Service's Horticultural Research Laboratory in Ft. Pierce, Fla., inspect trees for Asian citrus psyllids that have been killed by a beneficial fungus. USDA photo by Stephen Ausmus
the normal 2-year supply contract to 10 years, is forgiven.
"Using non-member earnings to help underwrite the cost is providing an incentive for replanting that is critical
get back into business. Each year you wait, you are pushing it that much further into the future before you have a producing grove."

Traditionally, orange groves here have been planted in the range of 100 to 150 trees per acre. To boost production in the face of the disease, many growers are now planting highdensity orchards of about 250 to 300 trees per acre, sometimes even up to 400 trees per acre. These plantings then become "hedge row" groves that "represent a more efficient use of our

## Marketing the co-op difference



B
eyond having to contend with a devastating citrus disease, Florida's Natural must do business in a highly competitive orange juice market. Its major competitors are juice brands owned by giant soft drink companies with far more resources at their disposal than the co-op has.

One important way Florida's Natural engages in this competition is to market the fact that it is a grower-owned juice brand, and that all of its oranges are grown in Florida, not overseas, as are much of its competitors' products.
The co-op includes profiles of its grower-owners on the side panels of juice cartons and emphasizes the "co-op difference" in its various marketing efforts. Florida Natural's Web page features profiles of a number of its grower-members to help reinforce the grower-owned message.
"We have found that being a grower-owned brand, with a home-grown product, really resonates with the public," says Bob Behr, CEO of the co-op. "The millennial generation and other young people seem to be especially receptive to the idea of buying farmer-owned, co-op products."

In the years ahead, he thinks being a co-op will be increasingly advantageous in the marketplace. If more co-ops with branded products market the fact that they are grower-owned, Behr says, it will reinforce and educate the public about the reasons they should consider buying co-op-produced goods.
"This is something we think co-ops should be doing - co-ops should take pride in being farmer-owned and market that fact."

- By Dan Campbell
land and water resources. They help to make our farms more sustainable," says Behr.

As he replants, Hunt is mostly going with 200 to 270 trees per acre.

In such a planting, when one tree is pushed, that hole is typically not replanted, he explains. "The other trees then grow into and fill that space."

By going with a higher density planting, plus using improved irrigation systems and adaptive horticultural practices, new groves can be economically viable, Hunt says. "Even
after replanting, it can take 3 to 5 years before a tree is producing, and 5 to 10 years before you are getting a good return on that grove."

## Many small growers may not bounce back

The 1 million new trees planted under the co-op's program is encouraging, but many more trees are needed, says Sparks. "I just did a Congressional briefing during which I said we will need 30 million new trees over the next 10 years just to get back
to where we were before HLB hit us in 2007."

When the disease was first identified in Florida, "we knew we were in for the fight of our lives, because it had already decimated China's industry," says Sparks, a 40-year veteran of the citrus industry. "They just gave up and moved their industry 250 miles away, something we can't do in Florida.
"Small- and medium-sized growers have long been the backbone of the Florida citrus industry, and it tears your heart out to see so many of them who aren't going to make it," Sparks says. One likely result of this disease will be greater consolidation on the production side, he notes.

Talk of alternative crops gets a verbal shrug from Sparks. Granted, he's a citrus guy, but he says realistically no other crop will ever be able to fill even a fraction of the gap that would be created by a collapse of citrus.
"Our sandy soil, hot days with cool nighttime temperatures and lots of rain make Florida ideally suited to growing citrus," he says. "It's nice to also have niche market crops [blueberries and peaches are among the crops being planted on more acres], but can they become an alternative to Florida's \$10billion citrus industry? Not likely."

To stimulate further replanting, a legislative priority this year for Citrus Mutual is aimed at getting federal tax rules changed so that rather than deprecating the cost of a new grove over 14 years, it can instead be listed as a business expense in the year it is planted.
"If we can do that, it will attract more investment in replanting," Sparks says. "That could play a big part in getting those 30 million trees back in the ground."

Despite all the suffering in citrus country, Sparks and Behr say they are heartened by a gradual rise of cautious optimism around the state as more growers adopt new farming strategies. "But," adds Sparks, "we still have a long way to go - period."

## Legal Corner

## IRS receptive to electronic communications between cooperatives and members

By Meegan Moriarty

Legal and Policy Analyst
USDA Rural Business-Cooperative Service
e-mail: meegan.moriarty@wdc.usda.gov


Two recent U.S. Internal Revenue Service (IRS) private letter rulings permit cooperatives to communicate electronically with members regarding written consent and notices of patronage dividend allocations.

In Private Letter Ruling (PLR) 201413002 (March 6, 2014), the IRS approved a consumer cooperative's electronic delivery methods for nonqualified written notices of allocation.

And in PLR 2605806 (May 6, 2016), the IRS said co-op patrons who consent electronically to include patronage dividends in gross income for tax purposes had signed a "consent in writing" for purposes of Internal Revenue Code (IRC) section 1388(c)(2)(A).

Under IRC section $6110(\mathrm{k})(3)$, private letter rulings may not be cited as precedent. However, rulings give some insight into the views of IRS on this subject.

## Consumer co-op automates communications

PLR 201413002 was issued to a consumer cooperative that sells "personal, living and family items" (as described in Internal Revenue Code section $1385(\mathrm{~b})(2))$. Sales are conducted via the internet, mail order and in the co-op's stores throughout the United States. The co-op issues all patronage dividends in the form of nonqualified written notices of allocation that may

be used as cash equivalents to purchase merchandise.

Members can also redeem the notices for payment in cash or in the form of a check. The consumer cooperative treats the nonqualified written notice of allocation used to buy merchandise as having been redeemed for cash or other property under IRC section 1382(b)(2).

Partly because of environmental and financial concerns, as well as in response to member demands, the cooperative decided to provide most information about patronage dividends
electronically, using traditional mail only when necessary. In the ruling, the cooperative proposed to provide the written notice of allocation through its website, by e-mail and/or by U.S. mail.

The cooperative provides information on its website about the balance of each member's unused patronage dividend. It can determine which members actually look at their balance. The cooperative will e-mail the notice to members who have provided an e-mail address to the co-op. The email subject line will state that the message contains patronage dividend

The IRS has determined that electronic notices of allocation and electronic consent both qualify as "written" communications with members.

the allocated dividend. The software can identify and keep track of undeliverable e-mail and can also show if subsequent attempts to reach the member by e-mail fail, in which case the cooperative will use U.S. mail to send the notice.

Members who did not supply an email address to the co-op, or who asked for paper copies, will also receive notices through the mail. When members come to the co-op stores or order online, they are prompted to use their allocations. Employees in stores can look up member allocation balances and apply them toward merchandise purchases.

As the end of the payment period for the dividend nears, the cooperative proposes to mail a notice to all members who were first notified by email, but had not accessed their patronage dividend information, opened the e-mail or used (by a predetermined cut-off date) the patronage allocation.

## Grain/supply co-op facilitates electronic consent

One of the "nation's leading integrated agricultural companies" applied for a ruling that electronic consent to include patronage amounts in income represents valid "consent in writing" under IRC section 1388(c)(2)(A). This agricultural cooperative proposed to put its
patronage dividends. A prospective member must provide a Social Security number or employer identification number, date the application, type a name on the signature line and click a box to submit the application.

The system will not permit the applicant to submit the form unless it is complete. Once the application is received, the cooperative will check to ensure that the information is consistent with other information the cooperative has regarding the applicant. If the information does not match other records, the agricultural cooperative will not accept the form. However, if the application is in order, the applicant is added to the list of patrons eligible to receive patronage dividends.

## Definition of "written"

In both rulings, the IRS approved the new means of communication.

As a preliminary matter, IRS looked at the definition of "written" in each ruling to determine whether electronic communications qualify. Subchapter T does not provide a definition of the word "written," so IRS turned to Black's Law Dictionary and several Internal Revenue Code sources.

IRS noted that Black's Law Dictionary defines "writing" as an "intentional recording of words. . [that includes] . . . electronic documents on computer media . . .emails and any other media on which

## IRS said that it is good practice for co-ops to require prior affirmative consent to electronic delivery, but in some circumstances it is not required

information, while the body of the message will make clear that the member can also request a free paper copy of the notice.

The cooperative has software that can identify whether the member has opened or viewed the e-mail and/or has clicked on links included in the message that provide information on how to use
"Patronage Application and Eligibility Form" on its website, where applicants could either print the form and mail it to the co-op, or fill it out online and submit it by clicking on a box.

Applicants who choose to fill out the form online check a box to indicate consent to include the dividends in income, or check a box that waives
words can be recorded." For purposes of the Circular 230 regulations (which addresses written advice by practitioners) and regulation section 301.6401(d)-1(d)(2) (which addresses requests to tax exempt organization for written materials), IRS said that electronic communications qualify as "writing." IRS determined that

## Live wires: proceed with caution

At a Feb. 16 National Council of Farmer Cooperatives meeting, George Benson, cooperative tax partner with McDermott, Will \& Emery in Chicago, warned cooperatives to proceed cautiously with reliance on electronic communications. For example, the consumer cooperative discussed in this Legal Corner did not have to worry about affirmative consent for electronic delivery.

However, many cooperatives need to get affirmative


#### Abstract

consent under the Job Creation and Worker Assistance Act. Wire transfers and other electronic means of delivery can present problems for cooperatives currently using checks and qualified notices, Benson noted. Additionally, there is uncertainty regarding whether cooperatives can issue domestic production activity deduction notices under IRC section 199(d)(3) via email.


electronic notices of allocation and electronic consent both qualify as written.

Regarding the agricultural cooperative, written consent would occur when the patron types in his or her name, rather than physically signing a paper document. IRS cited section 7001(a) of the Electronic Signatures in Global and National Commerce Act, 15 U.S.C. 96 (Public Law 106-229, adopted June 30, 2000), which states that a signature or a contract may not be denied legal effect solely because it is in electronic form. The Act generally defines a signature as a symbol attached to a contract and executed by a person with the intent to sign the document.

IRS ruled that the agricultural cooperative's new process for obtaining consent in writing from patrons will result in patrons "signing the electronic document as that term is understood today." Further, the patron's electronic signature and submission of the electronic document results in "consent in writing" under IRC section 1388(c)(2)(A).

## Payment by book entry and transmission

IRS addressed whether the consumer cooperative's electronic, nonqualified written notices of allocation qualified as patronage dividend payments occurring
during the payment period for the tax year when the patronage occurred under IRC Section 1382(b)(2). Having concluded that written notices of allocation that are transmitted electronically are "written," IRS looked at when the allocation is considered paid.

Under IRC regulation section 1.1382-2(b), the written notice of allocation is considered paid when it is issued to the patron; under regulation section 1.1388-1(b), an entry on the organization's books plus transmission to the patron is required.

Subchapter T, IRS notes, does not specify any particular means for transmitting the notices to members. Traditionally, cooperatives have used a variety of means for transmission, including delivery by hand, in the mail and at annual meetings. Actual receipt, however, is not required. IRS agreed with the consumer cooperative that e mail is also an appropriate means for transmission of notices.

The consumer cooperative also asked IRS to rule that a member has received patronage dividend information when he or she timely accesses the information on the website. In the ruling request, the cooperative analogized looking at the information on the website to a situation where a member is provided a notice at an
annual meeting. IRS views that making the patronage dividend information available on a website is directly analogous to making notices available at a meeting.

It is not necessary under these facts for the consumer cooperative to additionally mail the member the notice, according to IRS, even when the member has not affirmatively consented to electronic delivery. While some cooperatives are required to get affirmative consent to electronic delivery under the reporting rules in the Job Creation and Worker Assistance Act of 2002 (JCWAA), Public Law 107147 (March 9, 2002), in this case the consumer cooperative is not because it is exempt from the Form 1099 PATR reporting requirements.

The cooperative's members are not taxed on dividends connected with personal, living, and family items, and do not have to report the dividends to the IRS. As a result, it is unnecessary to require consent for electronic delivery of a dividend information statement to ensure that the taxpayer is receiving the proper income statement because the member/taxpayers is not required to report the dividend amount to the IRS.

Generally, however, IRS said that it is good practice to require prior affirmative consent to electronic delivery.

## Management Tip

## Tips for reducing your new employee turnover rate

By Stephen Sheppard<br>Senior National Account Specialist<br>GENEX Cooperative

Editor's note: This article is reprinted, with minor edits, courtesy Horizons, the member publication of GENEX, a cattle genetics cooperative headquartered in Shawano, Wis. GENEX is a part of Cooperative Resources International. While this article specifically focuses on dairy farm employees, many of these same personnel management practices can also apply to workers in almost any farming operation, or at a co-op supply store, feed plant or other co-op operations with introductory-level staff.
Over the years, many farms have grown from small dairies to large businesses. These farms often have to rely on employees with no previous agricultural experience. In some cases, farm workers never had a desire to be a part of the rural environment, but it was the job available when they needed work.

For dairy farmers, these entry-level positions are often in the milking parlor, where the work can be hard, dirty, unglamorous and relatively low paying. For those reasons, it can be difficult to find good help and often even harder to keep those workers you do find.
But after the individual is hired, it's your turn. It's your responsibility to make employees believe they made the right job choice, which helps you by reducing the turnover rate among newly hired staff.

So, how do you make new employees feel they made the right choice? A new employee requires five fundamental things in a new job:

## Explanation

What is my role? Why is it important?


Now, more than ever, our dairies are under
scrutiny. You bave an obligation to the industry
to make sure employees are properly trained and
know how to bandle a cow.

USDA photos by Lance Cheung

Education
What knowledge or skills do I need?
Prospective milkers often do not arrive with a great deal of formal education, but that does not mean we should not take initiative to educate them. I don't believe anyone wants to go through life not learning anything new. If you start a new employee with the idea that this is a place where you learn and expand yourself, he or she is more likely to want to stay, rather than move to another entry-level position elsewhere.

One common fear is that educated employees will take their new skills and move on to a new job. The reality is, if you don't teach people, they will quickly get bored and you will lose them anyway. It is important to encourage the new employees in the education process to help them feel part of the team.

Training
How do I carry out my role?
I have seen dairies take someone with no cow experience and throw them into the parlor to see what happens. That is not training! The situation leaves people feeling lost, intimidated and frustrated. Now, more than ever, our dairies are under scrutiny. You have an obligation to the industry to make sure employees are properly trained and know how to handle a cow. There are good training resources available on cattle handling. Be sure to use them.

The Farmers Assuring Responsible Management (FARM) program, administered by the National Milk Producers Federation, is an excellent, multifaceted resource for teaching employees about the proper care of dairy animals. It uses a national set of guidelines designed to demonstrate dairy farmers' commitment to outstanding animal care and a quality milk supply. (See related article, page 31.)

FARM program participants now supply more than 98 percent of the nation's milk. For more information, visit: www.nmpf.org and search "FARM program."

Keep open lines of communication for reporting back to the employee. Employees can feel in the dark about their job performance if they do not receive feedback about their quality of work. Or if they do, it may not be constructive feedback. This creates unease in the workplace.

Feedback needs to provide information and instruction for the employee to improve. Not all new employees will have what it takes for the position, but it should not be a sudden surprise when someone is let go due to poor performance. If employees are not reaching their defined objectives, it needs to be brought to their attention immediately with a clear direction of how they can improve and how long that improvement should take.

Do not wait for a performance review. Employees also need to know what the ramifications are if they do not start reaching their objectives.

Company policy should be for staff members to introduce themselves to new employees. Plan a welcome for the new employee. Assign one person to greet new employees, show them around the farm and give them insight into how the team functions.

Assign someone to answer the new employee's questions and listen to his or her concerns and suggestions. Entry level does not translate into unimportant. Take time to really acknowledge how much you value new employees. Work with them and mentor them. You can quickly become an important part of the person's life - giving them more than a job, giving them a place to belong.

Provide new employees with the tools needed to succeed. Then give them time to succeed. Dairies frequently look at cull rate in the first 30 days after calving and adjust management to keep that number as low as possible. In the same way, measure turnover rate in staff in the first 30 days. Consider the training and other resource costs to the dairy. Be willing to adjust management to keep the employee cull rate as low as possible as well.


#### Abstract

As president of the Cooperative Communicators Association (CCA), Tammy Simmons is working to further the mission of an organization which for 63 years has been helping the nation's cooperatives by developing the communications and public affairs skills of their staff members.

Simmons has been a cooperative communicator for the Kentucky Association of Electric Cooperatives (KAEC) for the past 28 years. She is currently the local co-op news coordinator for KAEC, providing local electric cooperative news to electric co-ops throughout the state. She also coordinates the efforts each month for 19 to 20 local section newsletters that appear in the association's statewide magazine, Kentucky Living. This involves writing, layout and design.


## What is the biggest reason people who do communications or public affairs work for a cooperative should join CCA?

D CCA is the only organization geared toward advancing the skills of professional communicators who work for cooperative businesses. Co-ops are unique, and as such they have an even greater need for skilled, ongoing communications than do other types of business. Co-ops adhere to a set of core principles: the 7 Cooperative Principles, which define the democratic principles and "service to members" philosophy that is the foundation of cooperatives. This can make getting our message out somewhat of a challenge. But, by becoming a member of CCA, our members have access to a network of more than 200 cooperative communication specialists who face many, if not most, of the same challenges they do.

What are some examples of how CCA accomplishes this mission?

[^0]software, to developing emergency communications and member recruitment plans;
D Webinars and workshops on key communications issues are held throughout the year;
D Co-ops 101 offers online training that teaches the coop basics we all need to know;
D The annual CCA Communications Contests recognize the best in communications work in four areas: writing, publications, photography and programs/campaigns. Members have access to online samples of past winning entries and critiques in the Communications Contest Showcase;
D The Master Cooperative Communicator Designation Program certifies that a member has a solid grasp of co-op fundamentals;
Dhirley K. Sullivan Educational Grants can help defray the cost of attending the annual institute; D 10 issues annually of CCA's excellent Communiqué newsletter, each filled with ideas that can help us do our jobs better;
D Participation in a members' online mailing list;
D Members pay discounted fees to attend the CCA Institute, regional workshops, webinars and for entries in the CCA Communications Contest;
D Networking is facilitated through our online,


Top: Expert speakers - such as Bob Cohen, CEO of Braintree Business Development Center in Ohio - discuss topics of vital interest to co-op communicators during CCA's annual institute and regional workshops.

Below: Why reinvent the wheel when you can prefect it instead? Breakout sessions - in which members network to discuss their experiences in finding solutions for communications challenges - are a highlight of most CCA Institutes.

Below: CCA's annual communications contest offers members a chance to have their work evaluated by professionals and to earn recognition, as seen here by Savannah Chandler of Georgia's Walton EMC cooperative. Photos courtesy CCA

members-only directory;
D Access to job postings from CCA member organizations; Deadership development opportunities through involvement in CCA committees, event-planning and experience on the board of directors.

## How have you personally benefited from membership?

D I cannot even count the ways CCA has been beneficial to me. From the moment I joined, I became very involved and began networking with others. I hear all the time that people who are a bit shy and are not natural "networkers" find it easy to "plug in" to the CCA network.

CCA has both expanded my leadership skills and given me the opportunity to become a leader. I was a regional ambassador the year our region won Region of the Year and received the Outstanding Leadership award, then chaired the annual CCA Institute. I've been a board member for six years.

There has been a revolution in communications during the past decade or more, with the rapid growth of the internet and social media. Are many co-ops "missing the boat" in this area?

D I think perhaps many co-ops were a bit slow to get onboard, but they are catching up fast. Many co-ops have exemplary social media strategies. CCA offers training in social media at our annual Communications Institute and in many of our regional and online workshops. The best in co-op social media efforts are also recognized in our communications contest.

## What's on the agenda for this year's Co-op Communications

 Institute?D The great thing about a CCA Institute agenda is that it offers opportunities to build skills for all types of communicators. The agenda for this year's institute, June 36 in Baton Rouge, La., is no exception. Sessions will be focusing on crisis communications, branding, writing techniques, social media, videography and layout and design.

Studies have shown that most long-lived co-ops tend to be those with strong communications programs. Yet when budgets get tight, this is often one of the first areas to take a hit. Your view on this?

D This does seem to be the case. Balancing a budget by reducing communications or public affairs will, more often
than not, prove counter-productive to the good of the coop. Many times the pendulum then swings back to the importance of communications, especially if a cooperative experiences a bad situation. I've seen it happen a few times within our own particular cooperative industry; it's usually a well-planned, positive communications plan that saves the day.

CCA members primarily come from agriculture and utility coops. Would staff from other co-op sectors - such as credit unions, grocery store, consumer/ retail and worker-owned coops - also benefit from membership? How about co-op staffers who may have member relations or even marketing as their primary duty?

D We do have members from those other co-op sectors and would welcome more. After all, communications strategies and techniques are pretty much the same regardless of what co-op sector you work in.

Being a communicator for 30 years, and a cooperative communicator for 28 years, I believe everyone in a co-op should be a communicator, no matter what position you hold at any particular type of cooperative. Cooperatives serve members. You must know how to communicate that unique philosophy with them.

So, the short answer is yes. Member relations and marketing folks rely on communications to get their job done. CCA membership is a great way to tap into the talent and knowledge base of professional cooperative communicators.

We also have members who work for advertising and public affairs agencies who have co-ops for clients. CCA membership is open to "all professional and student communicators involved and/or interested in cooperatives." If you are connected to cooperative communications in any way, as a freelancer, contract worker, contributor, student intern, or otherwise, then you should become a CCA member.

## Why should co-op management support staff in belonging to CCA?

D For a cooperative to thrive in these chaotic times, supporting your communications staff is vital. We must know how to appropriately communicate with our members. And, in the long run, a cooperative's management staff that supports its communications professionals' membership in CCA can affect the bottom line. Appropriate, positive communications keeps a cooperative strong.


By James Wadsworth, Ag Economist USDA Rural Business-Cooperative Service

Editor's note: This article is excerpted from "Vital Steps: A Cooperative Feasibility Study Guide," Service Report 58, which has been newly revised. To order the full report, send requests to:
coopinfo@wdc.usda.gov, or download from: http://www.rd.usda.gov/files/publications/S R58_CoopFeasibilityStudyGuide.pdf


A feasibility study is an integral part of cooperative business development and should be undertaken
by an experienced development practitioner. In most cases, an outside consultant is used to conduct the
feasibility study.
Most prospective co-op members and financiers view an objective evaluation of a project concept by an outside business development practitioner as vital. The objectivity brought to the project by an outside expert often provides a group with information that might have been overlooked by someone who is participating directly in the project.

Because hiring a consultant to create a feasibility study is such an important decision, the steering committee or other group leading the effort must use care when selecting that person or firm. In practice, consultants have differing levels of ability, and usually a consultant will be strong on some points and weaker on others. The key is to select a
feasibility practitioner who is skilled in cooperative development and versed in areas relevant to the type of project.

There are important criteria for selecting a qualified consultant (see sidebar, page 25) The steering committee will need to determine if a consultant is technically proficient enough to undertake a feasibility study and whether he or she has significant experience in doing so. The committee should review samples of previously prepared studies and speak with others for whom the person or firm has worked before contracting with them. It is important that a consultant have the traits required to work well within the group.

Consultants should have experience in the industry being studied.

Otherwise, they may not correctly identify critical factors. Given business complexity, it is almost impossible for one person to have experience in all areas.

Some consulting firms resolve this issue by having their feasibility specialist work with contracted industry experts. In any case, it is important to research many sources for all the pertinent information possible about an industry.

A team approach may, in some instances, be utilized to develop a study. For example, a cooperative development specialist could work jointly with industry specialists to create a feasibility study.

The consultant should also understand the unique aspects of cooperatives. Tax implications, distribution of net margins (profits), management, and other business considerations (e.g., governance) of cooperatives differ from those of other businesses, and the nuances of each must be properly presented.

The consultant should avoid preconceived notions about how the project will function. The study should not be an "off-the-shelf" document assembled from previously created studies. Rather, the consultant should pay particular attention to the ideas that the group has developed and craft a unique study suited to the group's needs. The consultant should work closely with the group and be receptive to its suggestions.

The consultant should also be prepared to make technical revisions or to correct errors, given group recommendations and wishes. Revisions are a normal part of the studydevelopment process. Revisions should focus on the validity of the assumptions and the technical design of the study.

Using an outside consultant brings objectivity to the feasibility study rather than merely providing the results that the group wants. Consultants have a legal obligation to provide a responsible analysis. They should not be asked to alter the results merely to conform to

members' desires for a project's viability.

## Balancing time and need

Timeliness is an important consideration when selecting a consultant. Projects are time sensitive. Usually, decisions to proceed await information provided in the feasibility study. So care and diligence required for a well-crafted study must be balanced against the desire for speed. A qualified consultant must be able to complete a well-designed study within a timeframe that serves the group's needs.

On the other hand, the timeline must be realistic. A consultant can only progress as fast as a group makes the required decisions, provides information to the consultant, and carries out its other project responsibilities.

Cost is an important factor. The expertise and skills that consultants offer a project must be weighed against
their cost. A quicker timeline could increase a consultant's fee. Preparing a pre-feasibility analysis may decrease the effort required to complete the feasibility study and reduce the cost.

Some public programs offered by the USDA's Rural Business-Cooperative Service, community development offices, the Small Business Administration, some cooperative development centers, and local business incubator programs provide technical assistance at little or no cost for creating feasibility studies. There are also grant programs available, such as USDA's Value-Added Producer Grants program, which can provide funding for a feasibility study if a project meets the program's criteria and is selected. This program requires a one-to-one matching contribution from the applicant.

A consultant should provide the data used to generate the financial tables and scenarios reported in the feasibility study and, preferably, an electronic spreadsheet format that can be easily manipulated. Although requesting this information can moderately increase the cost of a feasibility study, access to the actual data permits the group to use the information for later needs with greater flexibility. The group shouldn't, however, expect the consultant to continually revise the study after it has been finalized.

The data can also reduce the cost of creating the business plan if the group proceeds to that stage. Additionally, it can decrease the effort required for revisions if, in the future, the group changes the project's assumptions to differ from those in the study.

## After the selection

Once the consultant has been selected, the group should provide detailed instructions on the study requirements. There should be a legally binding contract between the parties. The group should consult legal counsel for assistance. The contract should state clearly the requirements and role of
both the group and the consultant. It should have timelines, delivery dates, explicit deliverables, and what is to be accomplished before payment is made. Often, the consultant receives a downpayment before the feasibility study has been conducted. The balance is paid only after the study has been reviewed and accepted by the group (and possible financiers, if appropriate). This gives the group more leverage to encourage timeliness or revisions. The contract should designate a third-party arbitrator to resolve any disputed items.

A complex, large-scale project may require several consultants to complete various aspects of the study. Multiple consultants can reduce the group's dependency on a single person or company. It also can permit the group to select experts from several fields. However, it also can complicate the coordination and consistency of the information received.

Before signing the contract, the group should discuss with the consultant arrangements for cost overruns, time delays, revisions, and what considerations will be made for these issues. Changes after signing the contract can be costly or delay the study results. All parties should be clear about what to expect prior to signing the contract and initiating the study.

## Working relationships

A few qualified members of the steering committee (if the committee is a large one), or the entire steering committee (if it is a small one) should be designated to work closely with the consultant or person developing the study. These group members must see that the feasibility study properly presents and reflects the right aspects of the project as it has been designed, and in accordance to the defined assumptions. Through this working relationship, the study should be tracked through all of its stages and its ideas reviewed and clarified.

Steering committee members with appropriate backgrounds and the ability

## Criteria for a co-op feasibility study consultant

D Has previous experience conducting feasibility studies.
D Has experience with the industry to be studied, or access to experience and associated professionals.
D Works independently and objectively (e.g., of equipment manufacturers, marketers, etc.).
D Understands cooperatives fully (their operations, governance, financial workings, etc.).
D Is willing to listen to the group's ideas.
D Works closely with designated contact members of the steering committee or group.
D Is willing to revise study, based on feedback.
D Accomplishes the study within an agreed-upon timeline.
D Works within the group's designated budget.
D Is a strong writer with skills in data analysis and spreadsheet design and presentation.
D Provides clear, useful information in the completed study.
to commit sufficient time to working with the consultant should be selected. These contact members represent the group's interests to the consultant. They are the contact to provide clarification and additional information that the consultant may require. Plus, they should provide periodic reports to
the group about the study's progress. They should also work with other group members and advisors to gather the information needed for the feasibility study. These members are obliged to express the wishes of the entire group and not just their own views.

Members or outside financiers will often perceive the reliability of the entire study based on its least accurate piece. An otherwise well-conducted feasibility study could be viewed as inaccurate or useless because of a simple mistake. To prevent this, the feasibility study should be carefully examined for overall clarity and logical consistency: Is the language appropriate? Is the document well organized? Can someone who is not familiar with the project understand the study and its findings?

Reviewers should confirm that the study's assumptions are clearly documented, well described, justified, and as accurate as possible.

Although the contact members take the lead in working with the consultant, others should review the study carefully before the group decides to accept it. Advisors - such as staff of a cooperative development center, USDA cooperative development specialists, consultants, university professors, or Extension agents - can provide an objective review and offer insights on content or study assumptions. This outside review can be especially useful when the group has used consultants to prepare the report. Often, a series of draft reports are presented to the group as the study proceeds. Issues identified that warrant changes to the study are then conveyed to the consultant.

This article covers just one of the key topics examined in Vital Steps: $A$ Cooperative Feasibility Study Guide (Service Report 58). Any groups exploring the possible formation of a cooperative are strongly urged to read the entire report (see editor's note at the beginning of this article).

# Co-op developments, coast to coast 

Send co-op news items to: dan.campbell@wdc.USDA.gov

## Members approve dairy co-op merger

Prairie Farms Dairy and Swiss Valley Farms announced in early February that members of both cooperatives overwhelmingly approved a merger. Both companies are industry-leading, farmer-owned cooperatives included on USDA's list of Top 100 Cooperatives. The merger is expected to close on March 31.
"We have had a great business relationship with Swiss Valley for many years and are pleased to have reached this important milestone," says Ed Mullins, CEO of Prairie Farms. "Much has changed since our cooperative was founded in 1938; the merger reflects our purpose, which is to generate sales and profit for our cooperative members.
"Consumption of fluid milk, our core product, has been declining for years, while cheese consumption has increased nearly 150 percent since 1975," Mullins continues. "The complementary nature of Swiss Valley's product line will help counter this major shift. At the same time, Swiss Valley is looking to grow its export business; with the merger, it will gain access to many Prairie Farms products, such as extended-shelf-life milk and cream."

The combined company will operate under the name of Prairie Farms Dairy Inc., with both organizations retaining their brand names: Prairie Farms Dairy and Swiss Valley Farms. Mullins will be CEO of the merged cooperative, while Chris Hoeger, former CEO of Swiss Valley, becomes president of the newly formed Prairie Farms Cheese Division.

Prairie Farms, based in Carlinville, Ill., is owned by more than 600 farm


It's now official: co-op members have voted to approve the merger of Swiss Valley Farms with Prairie Farms. The brand names of both co-ops will continue to be used in the marketplace. Photos courtesy Prairie Farms and Swiss Valley
families and has annual sales of more than $\$ 3$ billion. It has 5,700 employees and operates 35 manufacturing plants and over 100 distribution facilities. Swiss Valley Farms, Davenport, Iowa, has 400 producer-members and operates five cheese production facilities that manufacture a variety of awardwinning cheeses.

## Northwest grain co-ops to merge

Members of Pacific Northwest Farmers Cooperative (PNW), Genesee,

Wash., and Cooperative Agricultural Producers (Co-Ag), Rosalia, Wash., voted in December to merge. The new co-op, which will operate under the Pacific Northwest Farmers Cooperative name, will become official in June. According to a news item posted on PNW's website, the merger "passed with a super-majority vote from both companies."

The leadership of both co-ops strongly advocated for the merger in the months leading up to the vote. "PNW feels that with the relationship
we have established with Co-Ag and our partnership in McCoy, this is a natural fit," PNW CEO Bill Newbry says in a column in the co-op's most recent newsletter. "Co-Ag performs many of the same functions that PNW does and we only enhance each other's operations. We have been able to work with each other and are finding commonalities and synergies that will bring greater opportunities to our members."
"We feel this (merger) is a great fit, provides our growers with new opportunities and solidifies our place in the market," Co-Ag General Manager Derek Teal wrote in a recent co-op newsletter. "The grain business is changing faster than it ever has before and is becoming more competitive by the day. We feel that by merging with PNW, we can be ahead of the game and set precedence in the Pacific Northwest of what a grain company will look like today and many years into the future."

PNW was formed in 2008 through a merger of the Genesee Union Warehouse and Whitman County Growers. It now has 26 facilities in 17 locations with storage capacity of more than 14 million bushels, according to an article in the Lewiston Tribune. It has about 750 member-growers. It also has ownership in barge terminals on the upper Snake River and two rail loading terminals.

Co-Ag was formed in 1998 through a merger of farmer cooperatives in Oakesdale, Rosalia and Fairfield. It operates 21 elevators in Washington and Idaho and has a Snake River bargeloading facility, as well as loading facilities on two railways.

## Land O'Lakes reports record earnings

Powered by growth in its core businesses, as well as by unification with United Suppliers, Land O'Lakes Inc. has reported record net earnings for the year ending Dec. 31, 2016. The co-op reported a record $\$ 320$ million in net earnings on $\$ 13.2$ billion in sales and

## Co-op plans new soybean plant in North Dakota

Governor Doug Burgum and leaders of Minnesota Soybean Processors (MnSP) and its subsidiary, North Dakota Soybean Processors (NDSP), have announced that steps are being taken toward construction of a $\$ 240$ million soybean processing plant at Spiritwood, N.D. The plant would be an integrated soybean crush facility and refinery, crushing 125,000 bushels of soybeans per day. It would produce soybean meal; refined, bleached and deodorized soybean oil; and biodiesel.

MnSP is a cooperative that owns and operates a soybean crush facility and biodiesel operation in Brewster, Minn. It has selected a site on 150 acres near Spiritwood, where construction would begin following further due diligence, necessary approvals and a successful engineering study.

By selecting the Spiritwood site, MnSP is able to conduct a preliminary front-end engineering and design study, which will be used to determine feasibility of construction. MnSP is working with the North Dakota Agricultural Products Utilization Commission to complete the construction feasibility study.
"The potential for this type of value-added project is great news for our farmers and the entire state of North Dakota," Burgum said. "The NDSP plant will create value in the local community and beyond by creating 55 to 60 full-time jobs, supporting local service companies, vendors, and suppliers and supporting the soybean price paid to local farmers."

Burgum, MnSP Board President Bruce Hill and MnSP General Manager Scott Austin made the announcement during the annual Northern Soybean Expo and Trade Show in Fargo, where they were joined by North Dakota Agriculture Commissioner Doug Goehring.
"Our preliminary market analysis shows there are markets this facility would serve that would complement our current efforts at the Brewster facility to reach both global and domestic markets for meal and oil," Austin said. "We also believe that the biodiesel from this plant would serve both domestic and international markets."

The NDSP plant would annually produce 900,000 tons of soybean meal, which is usually used as livestock feed for poultry and swine but can also be used for cattle, and 490 million pounds of oil. Half of the oil will be used to produce biodiesel while the other half will be used for food-grade soybean oil. The plant would use steam from the nearby Spiritwood Station, a coal-fired power plant operated by Great River Energy.
returned a record $\$ 187$ million in cash patronage to its member-owners. This compares to net earnings of $\$ 304$ million and cash patronage to memberowners of $\$ 161$ million in 2015.
"We are pleased with another record year, particularly under current market conditions, and appreciate the dedication of our workforce and the
support of our farmer-owners," says Land O'Lakes President and CEO Chris Policinski. "We attribute our continued strong performance to our 'marketplace back' approach to doing business, which is different from the production orientation of many of our competitors. Our strategy is based on deeply understanding what our
consumers, customers and farmers need to be successful, and on developing innovative, value-added products - and increasingly services - to meet those needs. We know that our success depends on their success."

Land O'Lakes currently touches 50 percent of the nation's harvested acres and 25 percent of the producers through its independent, retail-owner network. It strives to serve as the voice of the farmer for its farmer-owners.

Coming off a record year in 2015, the company also achieved record performance in 2016 with growth in each of its core businesses despite challenging market conditions. The company increased the size and scale of its Crop Inputs and Insights division through acquisitions and the integration of WinField United. Further, it accelerated the revitalization of its Animal Nutrition division and saw continued growth of its Dairy Foods division.

The cooperative expanded its commercial footprint in Africa and China, through a partnership with Bidco Africa to create BIDCO LAND O'LAKES LTD, a new joint venture that helps farmers in East Africa improve animal nutrition. It also entered into an agreement with the intent to form a seed distribution joint venture in China.

The company announced several new steps in 2016 to its commitment to sustainability, including the creation of Land O'Lakes SUSTAIN (see related article, page 4). The SUSTAIN effort focuses on helping to ensure sustainable crop production by delivering insights, products and services and enhancing sustainability within the Dairy Foods and Animal Nutrition businesses. These efforts include working with other entities (including government) to improve efficiency and collaboration on conservation and sustainability programs.

In May, the company announced a public-private partnership with Minnesota Governor Mark Dayton designed to assist with water and soil
conservation in the state by working with growers and producers to help protect waterways.

In the fall of 2016, the company announced an expansion of its corporate headquarters in Arden Hills, Minn., growth that will add 200 jobs and allow all headquarters-based employees to work on one campus. Employees currently work on three campuses in Arden Hills, Shoreview and Roseville.

Through its business units, the co-op acquired Ceres Inc., completed a new trait agreement through Forage Genetics International, entered into a supply agreement with Southern States Cooperative (through Winfield United) and also signed a letter of intent to acquire the Southern States Cooperative feed business to further enhance services for customers in those regions. These efforts further support a commitment to help customers compete with industry-leading products and services in an era of industry consolidation.

## Troike named CEO of Ceres Solutions Co-op

Jeff Troike has been named president and CEO of Ceres Solutions Cooperative, created by the merger of two large, regional agricultural cooperatives: Ceres Solutions LLP and North Central Co-op. The merged coop will begin operating under the new name on Sept. 1.

Troike brings more than three decades of cooperative management to the new co-op, most recently as president and CEO of Ceres Solutions LLP. Raised on a family farm in Starke County, Ind., Troike is a Purdue University graduate and a current Land O' Lakes board member.
"With North Central Co-op CEO Mark Tullis' support, our collective goal is now to come together, utilizing shared strengths and vision, to serve farmers in the most innovative and relevant ways," says Troike. "We'll work hard on every level to transition seamlessly so that we can grow this
business for members and deliver results that bring maximum benefit to all members and customers."

While North Central Co-op and Ceres Solutions LLP will continue as separate business operations through August, the board's decision to name a CEO well in advance will help facilitate some decisions the combined leadership team will be making. Collaboration and idea sharing between the two organizations has already begun on several projects.

The merged co-op will serve energy, agronomy, animal nutrition and grain marketing needs in almost 30 Indiana counties and 7 Michigan counties. The new cooperative will encompass more than 60 facilities throughout the two states. The merger unifies two organizations with very similar structures, products and service offerings. It will have about 600 employees.

## CoBank reports record net income, patronage

CoBank's net income for 2016 rose 1 percent, to a record $\$ 945.7$ million, reflecting increased net interest income. The number was offset by a greater provision for loan losses, as well as higher Farm Credit insurance fund premiums and other operating expenses.

Net interest income increased by 7 percent, to $\$ 1.4$ billion, as a result of higher loan volume and increased earnings from balance sheet positioning, partially offset by lower spreads in the bank's loan and investment portfolios. CoBank's average loan volume increased 10 percent in 2016, to $\$ 91.6$ billion. This trend was driven by higher levels of borrowing from affiliated Farm Credit associations, grain cooperatives, food and agribusiness companies, rural electric cooperatives and communications service providers.
"2016 marked another year of strong business and financial performance for CoBank," says CEO Thomas Halverson. "Loan volume and net

## GROWMARK earns data transparency seal; promotes pollinator habitat

GROWMARK is the first agricultural cooperative system and complete farm supply and service organization to earn the Ag Data Transparent seal, the coop says in a recent news release. This accreditation recognizes GROWMARK for its transparency working with farmers and the standards of privacy and security of data.

The GROWMARK System's MiField Applied Research initiative and FS AIS (Advanced Information Services) enterprise decision tool aid in the collection of field data that are then used to show successful management trends and assist with the development of agronomic recommendations.

The Ag Data Transparency seal recognizes the GROWMARK System's commitment to growers on how farm data are collected, where and how they are stored and more.

In other GROWMARK news, the coop is working with $4-\mathrm{H}$ clubs to boost habitat for bee pollinators and to increase understanding of the vital role these pollinators play in agriculture. Honey bees and other pollinators are needed to pollinate crops such as apples, almonds, peaches, alfalfa, green beans, lima beans and strawberries, among dozens of others.

But pollinators are under stress from a number of factors, including pests, disease and lack of habitat, among others. The co-op's pollinator program, now in its second year, is open to 4-H clubs in Illinois, Iowa, Missouri and Wisconsin.

Prior to submitting an application, 4H clubs should locate a public place


GROWMARK is working with 4-H clubs to increase habitat for bees and other crop pollinators that are vital to American agriculture. Photos courtesy GROWMARK

and secure permission to plant a pollinator garden there. GROWMARK will provide enough seed to plant a 700 -square-foot area, as well as educational signage.
"Last year, we had nearly 40 clubs participating in the program," says Karen Jones, GROWMARK Youth and

Cooperative Education Specialist. "Growing the number of pollinator gardens this year will help provide even more habitat for bees and other beneficial pollinator species."
Questions may be directed to Jones at: kjones@growmark.com or 309-5576184.
income reached all-time highs, while credit quality, liquidity and capital levels remained solid. Most importantly, we continued to fulfill our mission by delivering dependable credit to our customers, partnering effectively with
other Farm Credit institutions, and providing support for rural industries and communities."

In March, the bank will distribute a record $\$ 588.1$ million in total patronage to customers, including $\$ 473.9$ million
in cash and $\$ 114.3$ million in common stock.

Patronage "effectively lowers the overall cost of borrowing for customers while enabling them to build equity in the bank and have a voice in the
governance of our business," Halverson says.
"Agribusiness borrowers are facing a number of challenges, including the continuing softness in commodity prices, a strong dollar and slower economic growth in China and other international markets," says David P. Burlage, CoBank's chief financial officer. "It's possible CoBank will see further deterioration in credit quality as a result of these trends. That said, overall credit quality continues to be strong, and we remain confident in the bank's risk-bearing capacity and its continued ability to meet the borrowing needs of its customers."

CoBank will provide more information about its 2016 financial results at its ongoing series of regional customer meetings around the country through April. The bank is a member of the Farm Credit System, a nationwide network of banks and retail lending associations chartered to support the borrowing needs of U.S. agriculture, rural infrastructure and rural communities.

## Co-op Festival slated for D.C.

The inaugural Co-op Festival will be held Sept. 30-Oct. 1 on the National Mall in Washington, D.C. The National Cooperative Business Association (NCBA) CLUSA says the event will be "an unprecedented opportunity to amplify the economic impact, diversity and sustainability of a business model 70 percent of consumers say they already trust."

Designed to kick off Cooperative Month, this two-day public awareness event will feature live music, highprofile speakers, games, giveaways and interactive booths to engage a potential audience of more than 65,000 people on the National Mall. The event will also serve as a visual reminder of the success and diversity of the co-op business model to elected officials in the nation's capital.

By leveraging public recognition of well-known cooperatives, NCBA says the Co-op Festival will connect the
trust consumers say they have for the co-op business model with the brands they already buy, while introducing them to the full spectrum of co-ops building a better world in the U.S. and globally.

For more information visit: www.coopfestival.coop.

## Despite lower sales, CRI takes steps to bolster future

Lower milk prices and other factors made 2016 a tough year, but Shawano, Wis.-based Cooperative Resources
"While 2016 did not deliver our desired financial results, CRI staff worked hard to advance the spirit of our strategic plan," Ruedinger said.

Among highlights of the year was an update to the GENEX Ideal Commercial Cow index, which provides dairy producers around the world the opportunity to breed for even healthier commercial cows. The economic-based, genetic index was updated to include proprietary health traits for a number of cow health factors.

In addition, AgSource took steps to


Even though lower milk prices took a toll on the co-op's bottom line in 2016, these delegates at the annual meeting of Cooperative Resources International (CRI) heard positive news about steps their co-op took last year to better position the business for the future. Photo courtesy CRI

International (CRI) - a holding cooperative consisting of AgSource Cooperative Services, GENEX and MOFA Global - still took strong steps to further the organization's mission.
"It was a challenging year," Chairman John Ruedinger said in his address to member-elected delegates at the CRI annual meeting, Jan. 24-25 in Bloomington, Minn. "Low milk prices for members and customers, coupled with a strong dollar, contributed to reduced revenues for your cooperative. Challenging as the year was in the face of economic adversity, CRI and its subsidiaries accomplished some significant steps to position your cooperative for the future."

CRI revenue for the fiscal year ending Sept. 30, 2016, was just under $\$ 190$ million, down from fiscal 2015.
improve efficiency and capacity by expanding its Midwest-based dairy herd improvement association (DHIA) program to include herds west of the Mississippi River and in the Northeast. To provide greater efficiencies in dairy herd testing services, AgSource and Eastern Wisconsin DHIC formed a joint venture called Co-DairyLytics LLC. On the laboratories side, AgSource expanded and upgraded processing technologies for soil, water, milk, food and environmental testing. The Ellsworth, Iowa, laboratory was relocated to a new, larger and fully integrated facility.

The year's accomplishments also included further organization of CRI's research program, known as the International Center for Biotechnology (ICB). Scientists at ICB conduct
cutting-edge research that spans several animal species and specifically focuses on advances in reproductive technologies and molecular and cell biology, along with DNA and genomics research.

## Vandenheuvel new VP at Calif. Dairies

Rob Vandenheuvel has joined the senior management team at California Dairies Inc. (CDI) as vice president of industry and member relations. Vandenheuvel will serve as the face of CDI to the industry, governmental and regulatory bodies, and will work directly with member-owners of the cooperative.

Based at CDI's corporate headquarters in Visalia, Calif., he reports to Andrei Mikhalevsky, co-op president and CEO.

Vandenheuvel had served as general manager for the Milk Producers Council (MPC) since 2007. Prior to his tenure at that trade association, he was a press secretary for the U.S. House of Representatives Ways and Means Committee in Washington D.C. He holds a BA degree in business from California State Polytechnic University, Pomona.
"As CDI continues to be an influential member of the dairy industry, Rob's indepth understanding of dairy policy and of the industry as a whole, on both the state and national levels, will make him an essential fixture on our team, especially as the industry continues to evolve at such a rapid pace," says Mikhalevsky. "Plus, his relatability to dairy producers strengthens CDI's ability to more efficiently respond to the market's needs. His extensive knowledge, experience, and existing relationships in the dairy industry complement CDI's vision to become the leading source of dairy nutrition for a healthy world."

California Dairies Inc. is the largest member-owned milk marketing and processing cooperative in California, producing 43 percent of the state's milk. Co-owned by more than 390 dairy

## Farmers Union Oil merges with CHS Ag Services

Members of Farmers Union Oil Co., a diversified agricultural retailer based in Oslo, Minn., have voted to join CHS Inc. The vote passed with 96 percent approving the proposal. The merger became effective in January.
"Our members are looking forward to the merger with CHS," says Curt Haugen, board chairman, Farmers Union Oil Co. "This will enhance products and services available to us. It will also offer our members and employees stability in the years ahead. It was important to us to remain a cooperative that pays dividends."
"We are encouraged about the opportunities ahead for both the customers and employees of Farmers Union Oil," says Mike Johnston, senior vice president, CHS. "Their business mix and expertise aligns well with the capabilities CHS currently has in the region. We look forward to enhancing and building upon that as we look to continue helping our farmer-owners grow successful operations."

Customers should expect a smooth transition, including continuity of staffing at its current locations as the group combines with the CHS Country Operations business, CHS Ag Services.
producers who ship 17 billion pounds of milk annually, CDI manufacturers quality butter, fluid milk products and milk powders.

## FARM Program adds stewardship module

In its continued effort to share the compelling story of continuous improvement on America's dairy farms, the National Dairy Farmers Assuring

Responsible Management (FARM) Program has opened participation in its third component, FARM
Environmental Stewardship (ES).
The Environmental Stewardship module joins the FARM Program's two other pillars, FARM Animal Care and FARM Antibiotic Stewardship. The voluntary FARM Environmental Stewardship program helps dairy producers augment their environmental management efforts by identifying ways to improve their on-farm sustainability.
"America's dairy farmers have long been active stewards of the environment," says Jim Mulhern, president and CEO of NMPF.
"Farmers should be proud that, today, producing a gallon of milk uses 65 percent less water, requires 90 percent less land and has a 63 -percent smaller carbon footprint than it did 70 years ago. The FARM Environmental Stewardship program captures more detailed data on these great advances, while at the same time presenting farmers with useful information that can help them improve their farms efficiency and use fewer natural resources, all while saving money."

FARM ES provides a comprehensive estimate of the greenhouse gas (GHG) emissions and energy use per pound of milk produced on dairy farms by asking producers a limited set of questions. The tool is based on a life-cycle assessment (LCA) of fluid milk conducted by the Applied Sustainability Center at the University of Arkansas, incorporating existing data from more than 500 dairy farms across the United States.

By tracking advances in dairy production efficiency, farmers can use FARM ES to assure dairy customers and consumers of their commitment to ongoing environmental progress. Producers can also use the results to identify opportunities for changes that could increase their farm's sustainability and reduce their cost of production.

Dairy cooperatives and farmers wishing to use the ES module can opt in through the existing FARM Program
database, which allows FARM evaluators to see the assessment in the existing Web and mobile applications. FARM has created a random sampling protocol for the organizations that choose to use the ES module. This voluntary protocol allows FARM Program milk handlers to randomly select farms for an assessment and provides instructions for how to document and promote the resulting improvements in their dairy supply chain.

The FARM Program has released several documents, videos and trainings to educate those interested in participating in the FARM Environmental Stewardship program. They can be found on the Environment page of the FARM website: http://nationaldairyfarm.com/environm ental-stewardship.

NMPF, along with its dairy community partners, Dairy Management Inc. and the Innovation Center for U.S. Dairy, support the use of safe and efficient environmental practices to help dairy operations remain stewards of a healthy ecosystem.

## Health clinic to serve ag workers and families

UnitedAg - a member-owned agricultural trade association representing more than 600 ag organizations in California and Arizona - opened its first Health and Wellness Clinic Jan. 17 in Visalia, Calif. Open to all UnitedAg members' covered employees and dependents, the clinic will provide a full range of services focused on the unique needs of the agricultural community - from acute and episodic care to health-risk and disease management, along with wellness and prevention.

It will not charge the service co-pays or deductibles required by most health plans.

UnitedAg Health \& Wellness Clinic will emphasize short wait times and features onsite lab services; it can fill many prescriptions onsite.

The clinic "represents a new model
in health and wellness - one that delivers the comprehensive, highquality services that ag workers and their families need at a cost they can actually afford," says Kirti Mutatkar, president and CEO of UnitedAg. "At the same time, our clinic's operating model focuses on helping to lower our member organizations' employee health-coverage costs by treating health problems early, before they worsen; reducing unnecessary emergency-room visits; and lowering worker absenteeism."

This is only the first of several such clinics UnitedAg plans to open. The clinic's services will be provided by Visalia-based Elite Corporate Medical Services, a respected health-services provider operating workplace clinics throughout California.

UnitedAg also met with healthcare
consumers, providers and payers.
Founded in 1980, UnitedAg's member organizations include cooperatives and other agricultural companies, including growers, shippers, coolers, processors, dairy and livestock producers and supporting businesses, among others.

## Census of worker co-ops announced

The first national study of worker cooperatives is a new research project of The Democracy at Work
Institute and the U.S. Federation of Worker Cooperatives, in partnership with researchers at the University of Wisconsin-Madison.

This study will further collective work to build the field, advocate for worker co-ops in the political arena and serve grassroots members, according to


UnitedAg opened this Health and Wellness clinic in Visalia, Calif., in January. The organization, which includes co-ops and other agri-businesses, hopes to open several similar clinics around the state to cater to the health needs of farmworkers and their families. Photos courtesy UnitedAg
and insurance industry leaders from across the country for a Health Innovation Forum on March 17 in Napa, Calif. Focused on finding affordable healthcare solutions for the agribusiness community and beyond, the Health Innovation Forum brought together innovators from across the healthcare spectrum to explore trends and implications of value-based vs. fee-for-service reimbursement on

Laura Hanson Schlachter, study director. "Our movement has spent years telling stories about how democratic worker ownership impacts people's lives, and this is DAWI's first effort to tell that story with highquality, empirical data that represent the entire spectrum of workplace experiences and attitudes across the country."

The study will roll out in two phases,

## Merger creates grower-owned ay data co-op

A cooperative of growers and an agricultural data nonprofit have agreed to combine their technology platforms and create a vital resource for datadriven agriculture - a neutral, secure and private data storage repository controlled by growers. In a joint announcement, the businesses said the combined platforms will be known as AgXchange and will be an independent data repository commercially available through the Growers Ag Data Cooperative (GADC), where producers can control, store, view and share their farm data.

The effort resulted from dialogue between Grower Information Services Cooperative (GiSC), a grower-formed data warehouse and sharing cooperative, and Agricultural Data Coalition (ADC), a nonprofit corporation formed by 14 founding members, including universities, industry organizations, agricultural groups and companies. The two organizations have been in communication since the ADC announced its mission to help farmers better control and manage their electronic data and facilitate noncommercial research.

The merger will provide the opportunity for the power of big data in agriculture to be firmly in the hands of America's farmers, says Zippy Duvall, president of the American Farm Bureau Federation, according to an article in the Farm Press. "Today is an exciting day," Duvall told the paper. "These kinds of revolutionary changes in agriculture are rare, and this merger provides farmers the kind of certainty and security they have been seeking when it comes to agronomic data management."

Realizing their common vision and missions based on grower-controlled data, GiSC and ADC agreed to combine their efforts and create more synergy between the two organizations and their members. GiSC will rebrand and become Growers Agricultural Data Cooperative. The two organizations will work closely to provide producers, universities and others a platform to securely store, control and, if they choose, share their data.
"After meeting with each other, we realized we were working toward the same end goal, though from slightly different approaches. It was quickly clear that combining efforts would provide substantial benefits and move us all toward the objective of a grower-controlled, independent data storage repository," says ADC President Ben Craker.

AgXchange is a platform developed through the collaboration of GiSC and ADC. GiSC has a working data storage and visualization platform. ADC developed a data storage and sharing pilot repository, featuring data connections to several precision farming data platforms. The two entities will integrate their complementary platforms to improve functionality and value, improve grower control over their data and allow growers to share their data with universities and other researchers, in addition to other service providers, if the growers choose to do so.
the first of which started in January. The research team will invite individuals at worker cooperatives across the country to participate in a brief, confidential survey about their workplace experiences and attitudes.

Responses will be aggregated across all participants, and no individual or workplace will be identifiable in the results.

In March, the research team began inviting a small group of employees and
worker-owners to participate in face-toface interviews and draw out key themes in the quantitative data. Again, all individuals and workplaces will remain anonymous.

Workplaces that would like to participate in the Worker Co-op Census, or which are interested in using the final data for other research, can contact Schlachter at: census@ usworker.coop, or (608) 262-9588.

## Gaskalla to lead Ag in Classroom program

Lisa Gaskalla, executive director of Florida Agriculture in the Classroom for 13 years, has been named executive director of the National Agriculture in the Classroom Organization (NAITCO). She served as interim executive director of NAITCO while the organization conducted a national search to fill the position in 2016.
"National Agriculture in the Classroom has grown to a point where it needed a full-time executive director to oversee the business of our growing organization," says Chris Fleming, president of NAITCO. "Lisa Gaskalla's experience managing a successful program in Florida will serve NAITCO well."
"I will strive to make NAITCO a premier K-12 agricultural literacy program for formal and informal educators interested in educating youth about the importance of agriculture at the state and national level," says Gaskalla.

NAITCO helps K-12 teachers use agricultural concepts to teach reading, writing, math, science, social studies and more by providing Web-based lessons and companion resources, a national conference, a national teacher awards program and professional development opportunities for Agriculture in the Classroom state contacts. It is a non-profit organization with a network of state contacts in nearly all 50 states and six territories.

For more information about the program, e-mail: info@naitco.org.

To order: USDA co-op publications are free, and available both in hard copy and on the Internet, unless "Web only" is indicated.


Co-ops 101: An Introduction to Cooperatives (CIR 55)

Probably the most widely read co-op primer in the nation, this report provides a bird'seye view of the cooperative way of organizing and operating a business. Now in an attractive new, full-color format. Ideal for classroom use and member organization meetings.


Organizations Serving Cooperatives (July-Aug. '15 magazine)

This special issue of USDA's Rural Cooperatives magazine includes complete contact information for nearly 150 organizations that provide services to cooperatives, with detailed overviews of 52 of the larger organizations. Listings include co-op financial institutions, trade/legislative groups, co-op development and co-op education organizations, among others. A limited number of these back issues are still available.


## Co-op Essentials (CIR 11)

A companion volume to Co-ops 101, this is an educational guide that teaches further basic information about cooperatives. It explains what cooperatives are, including their organizational and structural traits. It examines co-op business principles and the responsibilities and roles of cooperative members, directors, managers and employees.


Agricultural Cooperative Statistics 2015 (SR-79)

The nation's agricultural cooperatives set a new income record of $\$ 7$ billion in 2015, despite total revenue being down to $\$ 212.6$ billion, the lowest sales revenue level in the past five years. This annual report provides a detailed overview of the financial performance of the nation's farmer-owned co-ops in 2015, with 80 pages of data. It includes analysis by state and ag sector.


How to Start a Cooperative (CIR 7)

This long-time favorite has been freshened with updated editorial content and a new design. This guide outlines the process of organizing a cooperative business, including the necessary steps involved in taking the co-op from idea to launching pad.


Farmer, Rancher, and Fishery Cooperative Historical Statistics (CIR 1) Section 26 (in three volumes) Web only USDA began its survey of ag co-ops in 1913, when it counted 5,424 cooperatives with $\$ 636$ million in sales and about 651,000 members. The 2014 survey shows 2,106 coops with sales of $\$ 244.5$ billion and 2.1 million members. Historical co-op statistics have been compiled in three volumes: 19131950; 1951-1999; and 2000-2012. Also available in Excel format. Available at: www.rd.usda.gov/ publications/ publications-cooperatives

For hard copies: Please include the publication title and number, as well as the quantity needed. Send e-mail to: coopinfo@wdc.usda.gov, or call (202) 720-7395.

Send mail requests to: USDA Co-op Info., Stop 3254, 1400 Independence Ave. SW, Washington, D.C. 20250.

To download from the Web: Visit www.rd.usda.gov/publications/publicati ons-cooperatives.


The Nature of the Cooperative (CIR 65)

These collected articles, written by USDA ag economist Charles Ling, were originally printed in Rural Cooperatives magazine to examine the nature of cooperatives and their place in our free-market economy. Now expanded to 10 articles from the original 5 . Especially suited to college-level courses that examine the cooperative business model.


## Cooperatives in Agribusiness

 (CIR 5)Not only does this publication provide an overview of the many functions cooperatives play in the agribusiness sector, it also discusses how co-ops are financed, the role of utility and telephone cooperatives and other service co-ops. Ideal for use in in schools, FFA and 4-H.


Nominating, Electing and Compensating Cooperatives Directors (CIR 63)

This report examines the various methods co-ops use for nominating board candidates, voting policies and compensation practices for co-op directors. It also includes a look at the types of leadership skills needed by co-op board members. This collection of articles by USDA economist Bruce Reynolds originally appeared in USDA's Rural Cooperatives magazine.


Member Satisfaction with Their Cooperatives (RR 229) (Web Only)

Dairy cooperatives have adopted a wide range of organizational structures. In some cases, this resulted in fairly bureaucratic, complex business organizations that require high levels of management expertise. This study looks at how such organization affects the satisfaction members have with their cooperatives.


## Running a Food Hub, Volumes I-III <br> (SR 77)

Three volumes are now available in USDA's "Running a Food Hub" series of booklets. Volume 1, Lessons Learned From the Field, compiles best business practices for starting or expanding a food hub. It includes profiles of about a dozen food hubs. Volume II, A Business Operations Guide, focuses on key operational issues faced by food hubs, including choosing a location and equipment, as well as dealing with transportation and other infrastructure issues. Volume III, Assessing Financial Viability, provides insight into how changes in major costs and revenue affect the overall operations and profitability of food hub businesses.

## United States

Department of Agriculture
Washington, DC 20250
OFFICIAL BUSINESS
Penalty for private use, $\$ 300$
NOTICE:

- Check here to stop receiving this publication and mail this sheet to the address below.
- NEW ADDRESS. Send mailing label on this page and changes to:

USDA/Rural Business-Cooperative Service
Stop 3254
Washington, D. C. 20250-3255
Every Step Counts



[^0]:    D CCA's Annual Institute is three days of skillsbuilding and networking opportunities. Sessions can range from hands-on workshops for photo and design

