Members of the Illinois Council on Food and Agricultural Research (C-FAR) celebrated the organization’s 10th anniversary at their semi-annual meeting, held on August 19 at the Northfield Inn, Suites and Conference Center in Springfield. Founded in December 1993, C-FAR has brought together a broad-based coalition of industry stakeholders that partner with state officials and researchers throughout Illinois to strengthen the state’s food, agricultural, and related industry. A special celebration luncheon was held to commemorate this distinctive milestone. Highlights included remarks by Illinois Department of Agriculture Director Charles "Chuck" Hartke. A special presentation on C-FAR’s origins and its impact on Illinois food and agriculture was graciously "voiced" by nationally renowned farm broadcaster Orion Samuelson.

“It was really an honor for me to lead our 10th anniversary luncheon celebration,” said Alan Puzey, C-FAR chairman. “It reminded me just how hard our founders worked in structuring such a unique and distinctive organization. Their vision was phenomenal.”

During the business meeting, the FY04 membership account budgets were approved, including an increase in the legislative-contributions line item to give C-FAR leaders more opportunities to personally interact with state legislators. The FY04 1% member expense account budget (funded at 1% of the total C-FAR appropriation) was also approved. Chair and committee reports included a review of C-FAR’s legislative activities, research programs, and current membership roles; a report from the rules and procedures committee; and details on the nominating process for electing the 2004 board of directors. The rules and procedures committee has established a benchmark of 55% minimum for Organizational member attendance at future meetings of the membership. If this benchmark is not achieved at two consecutive future meetings, the committee recommends taking appropriate action at that time.

In his annual remarks, Executive Administrator Kraig Wagenecht shared his thoughts regarding a “top five” set of initiatives that were important during the past year and a second “top five” set important for the upcoming year. “It is humbling to think that in just our first 10 years, C-FAR has established itself as a national model in terms of a premier public–private partnership,” said Wagenecht. “While this type of recognition is flattering and speaks to the type of dedication our members have, we know that many challenges and opportunities await us. Our work has just begun.”

C-FAR’s five working groups met to review the portfolio of all C-FAR-funded research initiatives active in fiscal year 2004. The groups also examined their research focus areas to determine if additions or changes should be made. These revisions can be accessed via
Greetings

A MIX OF ELEMENTS

During my annual address at our recent semi-annual meeting of the membership, I concluded my remarks by sharing how I view C-FAR. I’d like to expand on these thoughts here. From my perspective, C-FAR is an intertwined mix of elements, and is intentionally so. I suggest there are four critical elements in the mix: membership support, sound programs, a state appropriation, and sound research.

Although C-FAR is celebrating its 10th anniversary, we are still on the maturing side of the growth curve. Practically every aspect of our organization has continued to become more fully developed each year since our founding in 1993. Through this decade of learning, we have come to clearly realize that the foundational mix of elements is critical to C-FAR’s being effective and to our future growth.

Our membership support is phenomenal. Today, some 69 industry-based organizations are on the front line of our membership. An additional 38 public-related entities join us as affiliate members, and another 100 as individual members. These are not members who just sit on the sideline; these are members who know that sound research, geared to the problems and opportunities of Illinois, is critical to the future of food, agricultural, and related industries.

Sound programs enable our membership to be engaged. The key to their engagement is creating an environment that allows our stakeholder-based members, alongside our research community partners, to identify the most pressing research...
There are four critical elements in the mix: membership support, sound programs, a state appropriation, and sound research.

needs of our state. With these priorities in place, a State of Illinois appropriation enables strategic research investments to be made. There is simply no substitute for high-quality, sound, publicly funded research.

The first three elements must lead to sound research, and the outcomes from this sound research must be tangible and usable by the industry, and in many cases by every Illinois citizen.

Maintaining and growing the vibrancy of each of these elements is critical to our future. While there is clearly a sense of pride in what we have been able to accomplish in our first short 10 years, we must not rest on days past. Each and every partner of C-FAR, whether a producer member, a researcher, or an elected official, must continue to strive to support a food and agricultural research program that enables Illinois, and its citizens, to fully realize the potential of this great state. C-FAR, through its unique mix of elements, is positioned now more than ever to help us realize that potential.

Welcome to our New Staff Member

We are pleased to share that Arena Jackson has recently joined the C-FAR team as a secretary, replacing Sheree Kirby. Arena has worked for the UIUC Department of Agricultural and Consumer Economics for several years and brings a wealth of professional experiences and expertise to our operation. Welcome, Arena!

10th Anniversary Celebration

CONTINUED FROM PAGE 1

the C-FAR website (www.ilcfar.org/research/focus.html) or by contacting the C-FAR office. The priorities outlined in the directives for research focus areas tell scientists what industry stakeholders have identified as Illinois’ most pressing research needs.

Principal investigators of C-FAR’s three new strategic research initiatives (SRIs) provided brief overviews of their research projects, which began officially on July 1. Dr. Stephen Long, professor of crop sciences and plant biology at the University of Illinois at Urbana-Champaign (UIUC), is leading the research effort on Biomass Energy Crops for Power and Heat Generation in Illinois. Long explained how his research team is investigating the potential of miscanthus as a biomass energy crop. “Miscanthus giganteus has many characteristics of an ideal biomass crop, including low input requirements, no known pests or diseases, and the ability to be harvested with conventional farm machinery,” said Long. “This particular form also is completely sterile, precluding any risk of its becoming an invasive species.”

The Illinois First Livestock Focus Initiative (IFLFI) is being led by Dr. Michael Hutchens, professor of animal sciences at UIUC. Hutchens described the focus of the initiative—addressing issues and opportunities to allow the Illinois livestock industry to be sustainable, profitable, and competitive in the world marketplace. Dr. George Czapar, University of Illinois Extension educator, is leading the SRI effort on Water Quality with a Focus on Total Maximum Daily Loads. Czapar provided leadership for the first water quality SRI and explained how his research team will help improve the scientific basis for developing water quality standards and help establish realistic endpoints for water protection efforts.

Michael Hutjens, Professor of Animal Sciences at the University of Illinois at Urbana-Champaign, describes his strategic research initiative, which addresses the economic and social challenges facing Illinois’ livestock industry.
As C-FAR celebrates the 10th anniversary of its founding, it also celebrates the long-term commitment demonstrated by its diverse membership. Organizations and individuals from across Illinois have retained their support of C-FAR and its mission through their membership and engagement both in times when state funding was on the upswing and during more challenging years. Of the 27 organizational members that joined the C-FAR coalition by June 1994, all of those associations still operating are actively engaged in C-FAR today.

Over the past 10 years, C-FAR has grown to include 69 organizational members, 38 affiliate members, and over 100 individual members. A remarkable characteristic during this period of growth has been the average annual retention rates of approximately 91% for organizational members, 95% for affiliate members, and 78% for individual members. These organizations and individuals clearly recognize the important role C-FAR continues to provide for Illinois’ food, agriculture, and related industry. “C-FAR represents a wide range of views and interests of various individuals and groups, including consumer and environmental groups, agricultural commodity organizations, farm organizations, and sustainable-agriculture groups,” said Leonard Gardner, a C-FAR organizing committee member from the then University of Illinois Agriculture Alumni Association, early in C-FAR’s development.

A key principle on which C-FAR was founded is to garner stakeholder input to help provide strategic direction for funded research programs. Members jointly volunteer thousands of hours each year identifying the highest-priority research needs of the state to see that the C-FAR investment achieves maximum benefit for Illinois and its citizens. “The dynamics of agriculture demand public funding of agricultural research. C-FAR’s structure permits stakeholder oversight and direction,” said C-FAR Vice Chairman David Downs. From participating in plenary, working group, and committee meetings to reviewing research proposals to discussing the need for publicly funded research with legislators and other state officials, C-FAR members are busy throughout the year insuring that the C-FAR process works effectively. The unique relationship among State of Illinois officials, state researchers, and stakeholders throughout Illinois via C-FAR has made the organization a national model for a premier public–private partnership.

An important element of C-FAR’s membership is its diversity of backgrounds and interests. As C-FAR was being formed, many were skeptical that a solid partnership among such a diverse group of industry partners was possible. However, through many hours of discussions and visioning retreats, what seemed like widely diverging perspectives were brought closer in line to see how Illinois’ top industry would be best served by collaborating in support of the industry as a whole. “C-FAR members recognize how greater benefits are realized for all industry stakeholders by their coming together for a common cause,” said Carol Keiser, membership chair. “The bonds, and friendships, that have been formed among our members continue to strengthen our industry and this special coalition.”

**C-FAR Members Demonstrate Long-Term Commitment**

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<th>Year</th>
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C-FAR represents a wide range of views and interests of various individuals and groups, including consumer and environmental groups, agricultural commodity organizations, farm organizations, and sustainable-agriculture groups.
Consumers can now more easily locate fresh, high-quality agricultural products grown and sold in central Illinois thanks to the newspaper-sized guide Farm-Direct: The Central Illinois Farmer-to-Consumer Directory of Locally Produced & Locally Sold Foods. With support from C-FAR, and the North Central Region Sustainable Agriculture Research and Education program, a group from Prairieland Slow Food, The Land Connection, and the University of Illinois Agro-ecology/Sustainable Agriculture Program put together the directory, which includes everything from organically raised chicken to black bing cherries to raw wool from Icelandic sheep to dried herbs and flowers. “As we began compiling the directory, it was amazing to discover the wealth of resources for farm-fresh produce and other agricultural products that are available from area producers,” said Laurence Mate, founder of the Prairieland Slow Food group.

The free guides were distributed through farmers markets, public libraries, University of Illinois Extension offices, businesses, and other outlets throughout central Illinois, in areas including Champaign-Urbana, Peoria, Bloomington-Normal, Decatur, Danville, and Kankakee. “Last year, 1,100 copies of a smaller directory of about 30 local producers were grabbed up quickly, so we knew there was a lot of interest in this type of information. This year, we expanded the directory to include about 300 producers and have distributed almost 10,000 copies,” said Mate.

The guide details producers and processors throughout central Illinois, from Peoria to Kankakee to Sangamon to Cumberland counties. Only growers who sell directly to consumers and only processors dealing with livestock raised primarily within 100 miles of the facility and selling those meat and dairy products directly to consumers are included. An online version of the directory is available at www.aces.uiuc.edu/asap/resources/farmdirect. Website visitors can click on product icons or counties on a map to find who sells a particular product or what products are available in a given county. There are also links to a list of farmers markets, a list of farmers who will contract with local consumers, and other information on buying farm-fresh foods and locally produced agricultural products. Funds for the online directory came from the C-FAR Information Technology SRI and were used to educate consumers about local foods and to provide hard-to-find information that enables consumers to be involved in local markets.

“We have tried to include all producers and processors in the region that meet our criteria, but we are sure to have overlooked some of them,” said Mate. “We invite people to contact us so we can include them now in the online directory and list them next year in the printed directory.”

Those interested in getting more information or being included in the directory can contact Deborah Cavanaugh-Grant at 217.968.5512 or via email at cvnghgrn@uiuc.edu.

Farm-Direct lists local sources for organically raised chicken, black bing cherries, raw wool from Icelandic sheep, and more.
Vegetative Filter Strip Research Yields Surprising Results

C-FAR-funded researchers at Southern Illinois University at Carbondale (SIUC) have been examining the effectiveness of a vegetative filter strip system for treating dairy farm wastewater. An SIUC research team consisting of Kenneth Griswold, Gary Apgar, Edward Varsa, and John Haddock sought to examine two parts of manure management: controlling the accumulation and movement of nitrogen and phosphorus, and limiting the spread of pathogens and antibiotic resistance. On dairy farms, two of the most concentrated sources of nitrogen, phosphorus, and pathogens are feedlot runoff and milking facility wastewater.

“One low-cost method of treating dairy farm wastewater is the vegetative filter strip system, which is approved for use in small dairy farms [less than 300 cows] in Illinois,” said Ken Griswold, an animal scientist in the College of Agricultural Sciences and the team’s lead researcher. “However, the acceptance rate of vegetative filter strips is low, which may be due to the lack of long-term data on its effectiveness.”

To determine the long-term effectiveness of vegetative filter strips, such a system at SIUC’s Dairy Center that has been in continual use for 25 years was used as a model. Installed in 1974, a 500-gallon underground tank collects feedlot runoff and milk barn wastewater from the 60-cow dairy center. A pump moves the watery mix from the tank to a grassy field, and a portable pipe sprays the wastewater at different points throughout the field on a rotating schedule. Between the summers of 2000 and 2002, researchers took more than 5,500 water samples, performing five to six tests on each one. They tested for the levels of nitrogen, phosphorus, and pathogen indicator organisms and their antibiotic resistance patterns in water at the surface and underground within and around the vegetative filter strip.

Comparing measured values from 1975 to current values, Griswold’s research team found the vegetative filter strip system to still be very efficient at removing nitrogen and phosphorus from the effluent and preventing the movement of these pollutants into surrounding surface waters. The system currently removes more than 90% of the nutrient load from the effluent before it enters the surrounding waters. An examination of the movement of pathogen indicator organisms and their antibiotic resistance patterns from the effluent to the surrounding surface waters revealed that the vegetative filter strips reduced the organism levels 100- to 10,000-fold. Seven common antibiotics were tested against the streptococci bacteria collected, and intermediate resistance was found to several of the antibiotics, including streptomycin, tetracycline, and oxytetracycline. “While our results suggest that the system is catching most of the antibiotic-resistant pathogens before reaching the streams, some did get through,” said Griswold. “And what’s most interesting is that [streptomycin, tetracycline, and oxytetracycline] haven’t been used in our dairy for 20 years.”

Griswold suspects that migrating pigeons are responsible for carrying the foreign antibiotics or the resistant bacteria to the dairy farm. In testing dropping samples from the cows, pigeons that flock to the dairy, and deer traveling through adjoining fields, Griswold found the same bacterial drug-resistance patterns in the pigeons and the cows. “One of our theories is that the pigeons go to the SIUC Swine Center for breakfast, pick up some spilled feed that contains the antibiotic, then head to the dairy for lunch. While they’re eating there, they’re also defecating on the feed. When the cows eat that feed, they’re getting the antibiotic or the bacteria that have become resistant to those antibiotics too.”

“More research needs to be done to prove our theory and to track antibiotic resistance in broader populations,” said Griswold. “And while vegetative filter strips have been shown to be effective in keeping nitrogen and phosphorus from entering our waterways, we may find it important to develop other systems to protect us from drug-resistant bacteria.”

“This work is important to dairy farmers and all other livestock producers in Illinois. As environmental
regulations have become tougher, the cost of handling manure and runoff has increased. Our study clearly indicates that vegetative filter strips are an environmentally sound means of handling feedlot runoff, and the strips are approximately one-fifth the cost of the traditional lagoon systems.” Griswold added, “The willingness of C-FAR to fund this work was tremendously important to the animal agriculture industry. Without C-FAR funding, there would still be a question as to the long-term viability of vegetative filter strip systems for treating feedlot runoff, which would further limit their use on Illinois dairy farms.”

NEW WEBSITE PROVIDES VALUABLE WATERSHED MANAGEMENT RESOURCES

The Illinois Watershed Management Clearinghouse recently unveiled a new website for those interested in Illinois watersheds and their management. The new site was developed with support from University of Illinois Extension, the Illinois Environmental Protection Agency, the Illinois Department of Natural Resources, and C-FAR. The site, located at www.watershed.uiuc.edu, provides a wealth of information, including tips for starting a watershed management group, plans created by existing groups, a watershed locator with contact information on local watershed groups by county and by region, and mapping tools that enable visitors to get a detailed map of their area and determine which watershed they live in. The website also includes a calendar where watershed groups can post their upcoming activities. “The website contains many features that are useful to both watershed groups and individuals. Since everyone shares the responsibility of protecting our water resources, it makes sense to have the best information readily available,” said George Czapar, University of Illinois Extension.

C-FAR
www.ilcfar.org

NAT TOOLS FOR GOOD HEALTH
www.nat.uiuc.edu
Offers tools for analyzing diet and food choices.

FARM.DOC
www.farmdoc.uiuc.edu
Provides farmers with decision-making information and analysis tools.

ILLINOIS TRAILL
il-trail.outreach.uiuc.edu
Organizes livestock research, information, and expert services.

ALTERNATIVE CROPS FOR ILLINOIS
www.sws.uiuc.edu/data/altcrops
Helps farmers identify and find information on potential alternative crops.

INTERACTIVE AGRONOMY HANDBOOK
web.aces.uiuc.edu/iah
Offers databases and online resources to complement the printed handbook.

PEST MANAGEMENT & CROP DEVELOPMENT BULLETIN
www.ag.uiuc.edu/cespubs/pest
Provides scouting reports, management advice, and decision aids.

ILLINOIS IPM ONLINE
www.ipm.uiuc.edu
Offers an environment for learning about integrated pest management.

ILLINOIS WATERSHED MANAGEMENT CLEARINGHOUSE
www.watershed.uiuc.edu
Helps groups create and implement plans to address local watershed issues.

ILLINOIS WORLD FOOD AND SUSTAINABLE AGRICULTURE PROGRAM
web.aces.uiuc.edu/wf
Covers world food issues and related agriculture and natural resource implications.
calendar
2003-2004

November 12  Board of Directors Meeting
November 13  C-FAR Day (ISU Farm at Lexington)
January 14  Board of Directors Meeting
February 17  Annual Meeting (Northfield Inn, Suites and Conference Center, Springfield)
  March 8  Agricultural Production Systems Working Group Meeting
  March 9  Expanding Agricultural Markets Working Group Meeting
                      Rural Economic Development Working Group Meeting
March 10  Human Nutrition and Food Safety Working Group Meeting
                      Natural Resources Working Group Meeting
March 11  Board of Directors Meeting
July 7  Board of Directors Meeting
August 17  Semi-annual Meeting (Springfield)
September 8  Board of Directors Meeting

Please call the C-FAR office or check the calendar on the C-FAR website at www.ilcfar.org for further details.