

**Iowa Learning Farms Program  
13IFLM005  
Integrated Farm and Livestock Management Demonstration Program**

**Year-End Report  
January-December 2013**

**INTRODUCTION**

What a year 2013 was. Iowa Learning Farms staff was busy with a greater variety of activities than in years past. We wrote more grants and were awarded four new grants to demonstrate and research cover crops. Iowa Learning Farms, along with PFI, has become a recognized leader in cover crops in Iowa. Findings from 2013 follow-up evaluations show that farmers coming to our field days are making changes on their fields. Preliminary figures from these evaluations: 36,784 new acres have cover crops in 2013—over 16% of all the cover crops planted last year! We will have final results from evaluations at the end of the month—the number will continue to increase. With good attendance at all of our 32 workshops and field days, farmers are responding to the message that increased residue and cover crops are vital to sustained farming and nutrient reduction – now and for future generations.

Our team along with student interns took the Conservation Station fleet to all corners of the state teaching Iowans about soil and water quality. With our sister program Water Rocks! we have increased the flexibility and versatility of our youth outreach so we are now able to hold events from February through November. Event locations included schools, outdoor classrooms, libraries, county fairs, Fairfield and Cedar Rapids farmers' markets, and festivals.

This year, ILF completed its third season of webinars. The archival series, even from the first year, continue to get hundreds of views a year. The topics have been timely, novel and very informative. Our top webinar for all three years is Rick Cruse's presentation on soil erosion. Dr. Cruse is scheduled to present updated information during a webinar in April.

All of our video materials continue to be in great demand on both the web and as hard copies. The book *Water Quality Matters To Us All* continued to have strong distribution throughout 2013. Comito had two articles published in peer-reviewed journals this year. In addition, we released an op-ed series on the Nutrient Reduction Strategy that was picked up by newspapers across the state.

As you can see, Iowa Learning Farms continues to be on the front line of the conservation discussion in Iowa. We hope you keep helping us move from *building* a Culture of Conservation to *preserving* it!

--Jacqueline Comito  
*ILF Program Manager*

--Matt Helmers  
*ILF Program Manager*

<b>Field Days/Workshops= No. in Attendance</b>	<b>Meetings/Presentations= No. in Attendance</b>	<b>Conservation Station or Classroom events=No. in Attendance</b>	<b>Publications/Educational Materials=Distribution</b>	<b>Webinars</b>
March 15: NW Iowa No-till/Cover Crop field day, Merville=167 (Stevenson)	Jan. 11-12: Practical Farmers of Iowa conference, Ames=290 at our sessions and booth—total at conference, 654 (All staff)	Feb. 20: Conservation “AgStravaganza,” Maquoketa=30 (Stevenson)	<i>Human Ecological Review</i> , January 2013, “Tillage Practices, the Language of Blame, and Responsibility for Water Quality Impacts in Row Crop Agriculture” Comito, Wolseth, Wright Morton	January: Jon Wolseth, Jacqueline Comito Live participants=97 *276 archive views as of 4/1/2013
March 19: Benton Co. Cover Crop Field Day, Luzerne=90 (Andrews, Comito)	Jan. 22: Conservation Partnership Day, Des Moines=70 (Comito, Helmers, Staudt)	March 4: Practice Run of Wetlands Module, Ames=11 (Stevenson, Staudt)	<i>Wallaces Farmer</i> January: • Honors to ‘Women of Innovation’	February: Mark Rasmussen Live participants=27 *82 archive views as of 4/1/2013
March 21: Clinton Co. Cover Crop Field Day, Welton=90 (Andrews, Stevenson)	Jan. 31: Black Hawk Lake Listening Session, Wall Lake=8 (Comito, Andrews, Wolseth)	April 5: St. Cecilia After School STEM Club, Ames=40 (Stevenson, Meerdink, Evans)	<i>Human Organization</i> , February 2013 “The State’s Role in Water Quality: Soil and Water Conservation District Commissioners and the Agricultural Status Quo” Comito, Wolseth, Wright Morton	March: Dan Barker Live participants=38 *51 archive views of 4/1/2013
March 22: Black Hawk Lake Watershed Field Day, Breda=85 (Comito, Stevenson, Wolseth)	March 4-5: Iowa Water Conference, Ames=31 at booth (Andrews, Brown, Staudt, Stevenson)	April 10: Taft Elementary School, Humboldt=47 (Stevenson, Evans)	<i>Wallaces Farmer</i> February: • Groups join forces to foster cover crops	April: Andy Larson Live participants=33 *53 archive views as of 7/1/2013
March 26: Carroll Co. Cover Crop Field Day, Dedham=70 (Andrews)	March 9: Leopold Center Board Meeting, Ames=20 (Comito, Helmers)	April 12: North Fayette School visit, West Union=109 (Comito, Staudt, Evans)	<i>Wallaces Farmer</i> March: • ILF, PFI co-host field days • Growing beans, corn and covers	May: Tony Toigo & Patti Cale-Finnegan Live participants=24 *61 archive views as of 7/1/2013
March 28: Montgomery Co. Cover Crop Field Day, Red Oak=80 (Andrews, Stevenson)	June 25: Iowa Ag Educators Annual Conference, Ankeny=41 at vendor table (Juchems, Meerdink)	April 19: Fremont-Mills School Visit, Tabor=169 (Stevenson, Evans, Staudt)	<i>Wallaces Farmer</i> April: • CSCAP crosses paths with ILF	July 17: Michael Castellano Live participants=43 *213 archive views as of 10/8/2013
April 1: Cover Crop Field Day, Dordt College, Sioux Center=83 (Helmers, Staudt)	July 10: Meeting with STEM coordinator Lynne Campbell, Ames (Comito, Staudt, Meerdink)	April 20: Cedar Rapids Ecofest=200 (Trailer checkout)	<i>Wallaces Farmer</i> May: • Familiar faces return	Aug 21. Jim Gillespie & Shawn Richmond Live participants=59 *104 archive views as of 10/8/2013

April 2: Cover Crop Workshop for CAP train-the-trainer event, ISU FEEL building=60 (Helmers, Comito, Andrews)	July 23: Splash! Journalism Camp, DMACC Boone Campus=17 (Comito, Stevenson, Staudt)	April 22: Cowles Montessori School Environmental Day, Windsor Heights=113 (Andrews, Staudt)	<i>Wallaces Farmer</i> June: • Wetlands have key role in nutrient strategy	Sept 18: Comito & Staudt Live participants=49 *74 archive views as of 10/8/2013
April 4: Cover Crop Workshop, Elkader=86 (Andrews, Stevenson)	Aug. 16: Nutrient Strategy field day for ISUEO Field Agronomists, FEEL, Boone=25 (Helmers, Comito, Juchems, Motschenbacher)	April 23: Valley Lutheran Christian School visit to ISU, Ames=57 (Comito, Benning, Andrews)	<i>Wallaces Farmer</i> July: • New loan targets water upgrades • Tune in to ILF webinars • Field days announced	Sept. 23: Clare Lindahl & Vince Sitzman Live participants=108 *51 archive views as of 10/8/2013
May 7: ICCWG field agronomist meeting=25 (Andrews, Comito)	Sept. 4-5: Conservation Districts of Iowa annual conference, Des Moines (all staff)	April 25: Howard County 3 <sup>rd</sup> Grade Arbor Day Outdoor Classroom, Cresco=106 (Andrews, Staudt)	<i>Wallaces Farmer</i> August: • What's happening down below?	Nov. 20: Jerry Hatfield Live participants=21 *220 archive views as of 1/6/14
June 26: Cover Crop Field Day, Jeff Pape farm, New Vienna=32 (Andrews, Kelly)	Sept. 26: Midwest Environmental Education Conference, Coralville=66 (Comito, Staudt, Stevenson)	April 26: Ringgold Co. 5 <sup>th</sup> -6 <sup>th</sup> Grade Outdoor Classroom, Mount Ayr=125 (Stevenson, Comito)	<i>Wallaces Farmer</i> September: • Op-ed: 'Voluntary' not same as optional • Water Rocks! • Krouse rotates crops, chickens	Dec. 18: Bill Crumpton Live participants=36 *57 archive views as of 1/6/14
July 17: Smeltzer Farm Field Day, Otho=70 (Helmers, Comito, Andrews, Mahaney)	Oct. 23: Iowa Science Teaching Section of the Iowa Academy of Science Fall Conference, Ames=75 (Comito, Stevenson, Staudt)	April 26: AgCiting Youth Outdoor Classroom, Sioux Center=136 (Trailer checkout)	September Op-Ed article "Voluntary Shouldn't Mean Optional" Iowa daily newspapers	
July 24: Triple C Farms Field Day/Pasture Walk, Leon=39 (Comito, Staudt)	Nov. 4: ISU Beginning Farmer Network student organization presentation, Ames=35 (Staudt)	April 27: Onawa Community Earth Day Festival, Onawa=30 (Stevenson, Domingues, Mahaney)	<i>Wallaces Farmer</i> October: • Op-ed: Good reasons to install wetlands • Consider cover crop mixtures	
July 30: Cover crop field day, Albert City=71 (Juchems, Andrews)	Nov. 4: ISU Soil and Water Conservation Club presentation, Ames=12 (Staudt)	April 30: 50 <sup>th</sup> -6 <sup>th</sup> Environmental Field Day, Carroll=146 (Stevenson, Comito)	October Op-Ed article "Consider Wetlands" Iowa daily newspapers	
July 31: Southwest Iowa Cover Crop Planning Session, Shenandoah=95 (Andrews)	Nov. 5: ISU Agricultural Ed/Collegiate FFA Club presentation, Ames=33 (Staudt)	May 7: Buena Vista Co. 5 <sup>th</sup> -6 <sup>th</sup> Grade Outdoor Classroom, Peterson=111 (Stevenson, Evans, Juchems)	<i>Wallaces Farmer</i> November: • Op-ed: Covers are conservation bargain • Try playing Rock your Watershed!	
Aug. 1: Cover crop field day, Arlyn Kauffman farm, Weldon=50 (Juchems)	Nov. 5: ISU Chapter of National Agri-Marketing Association Club, Ames=36 (Staudt)	May 8: Clay Co. Indoor "Outdoor" Classroom, Spencer=192 (Meerdink, Juchems)	November Op-Ed article "Cover Crops" Iowa daily newspapers	

Aug. 4: Field Day, Laura Krouse farm, Mt. Vernon=90 (Andrews, Brown, Kelly)	Nov. 7: American Fisheries Student Organization meeting presentation, Ames=12 (Juchems)	May 9: Iowa Children's Water Festival, Ankeny=136 (Comito, Juchems, Evans)	<i>Wallaces Farmer</i> December: <ul style="list-style-type: none"> <li>Op-ed: Buffers make a big difference</li> <li>Vist ILF at PFI conference</li> </ul>	
Aug. 6: Cover Crop field day, Southern Iowa Electric, Bloomfield=52 (Andrews)	Nov.7: Women, Food and Ag Network National Conference, Des Moines=30 (Brown)	May 10: Clayton Co. 4 <sup>th</sup> Grade Safety Days, Garnavillo=145 (Staudt, Stevenson)	December Op-Ed article "Buffers" Iowa daily newspapers	
Aug. 22: Farmers Elevator Coop Check Plot field day, Sioux Center=185 (Stevenson, Staudt)	Nov. 11: ISU Public Service in Agriculture Student club presentation=4 (Staudt)	May 13: Boone High School Science Inquiry Day, Boone=205 (Andrews, Kelly, Juchems)	<i>Human Organization</i> , Vol 27, No 4, 2013, "Stewards, Businessmen, and Heroes?: Role Conflict and Contradiction Among Row-Crop Farmers in an Age of Environmental Uncertainty" Comito, Wolseth and Morton	
Aug. 27: Field Day, Arliss Nielsen/Larry Haren farms=85 (Stevenson, Comito)	Nov. 12: ASABE Student Organization meeting presentation, Ames=45 (Juchems)	May 13: Sioux Co. 5 <sup>th</sup> -6 <sup>th</sup> Grade Outdoor Classroom, Hawarden=77 (Staudt, Domingues, Meerdink)		
Aug. 29: Cover Crop Field Day, Bedford=82 (Staudt)	Nov. 19: Agricultural Systems Technology Club meeting presentation, Ames=35 (Juchems)	May 14: Bremer Co. 5 <sup>th</sup> Grade Field Day, Frederika=136 (Juchems, Kelly)		
Aug. 30: Ag Engineering and Agronomy Farm field day, Boone=120 (Juchems, Motschenbacher)	Dec. 10: NW Iowa Cover Crop meetings, Merville & Boyden=89 total (Juchems, Moore)	May 14: Iowa Corn Growers Conservation Demonstration Field Day, Melbourne=40 (Helmets, Comito, Meerdink)		
Sept. 10: Nutrient Reduction Strategy Field Day, Gilmore City=23 (Helmets, Stevenson, Motschenbacher)	Dec.11: Extreme Weather Adaptation Symposium, Des Moines=150 (Comito on speaker panel) (Juchems, Staudt, Stevenson, Brown, Moore)	May 15: Clarion-Goldfield 4 <sup>th</sup> -5 <sup>th</sup> Grade School Visit, Clarion=70 (Stevenson, Staudt)		
Sept. 11: Field Day, Mark Jacobs farm, Hedrick=33 (Juchems, Benning)	Dec 13: Iowa Cover Crop Working Group=12	May 17: West Liberty Outdoor Classroom, Muscatine County=102 (Comito, Juchems)		

Sept. 25: Big Creek Lake Field Day=18 (Juchems, Motschenbacher)		May 21: EPC Meeting, Windsor Heights=42 (Helmers, Comito, Staudt, Kelly)		
Oct. 23: Cover Crop Field Day, Southeastern Community College, West Burlington=63 (Juchems)		May 22: Clayton Co. Cover Crop Field Day, McGregor=65 (Juchems, Domingues)		
Nov. 1: Cover Crop Field Day, Storm Lake=34 (Juchems, Motschenbacher)		May 22: Roland-Story 2 <sup>nd</sup> Grade Classroom visit, Story City=87 (Evans, Meerdink, Wright)		
Nov. 7: Cover Crop Field Day, Amana=59 (Juchems)		May 23: Edwards Elementary 3 <sup>rd</sup> -4 <sup>th</sup> Grade Classroom Visit, Ames=105 (Stevenson, Juchems, Wright)		
Nov. 12: Cover Crop Field Day, Rick Juchems Farm, Plainfield=68 (Juchems, Comito, Helmerts)		June 1: Fairfield Public Library Visit=110 (Staudt, Kelly, Meerdink)		
Nov. 13: Cover Crop field day, Don Elsbernd farm, Postville=18 (Staudt)		June 3: Garner Public Library Visit=40 (Juchems, Mahaney, Domingues)		
Nov. 14: Cover Crop Field Day, Mark Peterson farm, Stanton=18 (Stevenson)		June 5: Sumner Public Library Visit=29 (Staudt, Domingues, Evans)		
Nov. 19: Cover Crop field day, Fred Abels farm, Holland=40 (Juchems)		June 6: Oelwein Public Library Visit=75 (Meerdink, Kelly, Mahaney)		
		June 7: Winfield Public Library Visit=50 (Stevenson, Wright)		
		June 8: Big Creek Lake Watershed Appreciation Day, Polk City=160 (Juchems, Meerdink, Domingues)		

		June 10: Newhall Public Library Visit=30 (Stevenson, Wright, Staudt)		
		June 11: Algona Public Library Visit=38 (Meerdink, Juchems, Domingues)		
		June 12: Madrid Public Library Visit=92 (Meerdink, Kelly, Mahane)		
		June 14: Grimes Public Library Visit=63 (Comito, Wright, Mahaney)		
		June 17: Manchester Public Library Visit=39 (Juchems, Meerdink, Mahaneh)		
		June 18: Marion Public Library Visit=165 (Wright, Domingues, Evans)		
		June 18: Arlington Public Library Visit=54 (Andrews, Kelly, Meerdink)		
		June 20: Ely Public Library Visit=72 (Wright, Kelly, Mahaney)		
		June 20: Hiawatha Public Library Visit=130 (Wright, Kelly, Mahaney)		
		June 21: Sac City Public Library Visit=43 (Andrews, Domingues)		
		June 22: Breakfast on the Farm, Calmar=182 (Kelly, Mahaney)		

		June 24: Wall Lake Public Library Visit=55 (Meerdink, Domingues)		
		June 26: Keosauqua Public Library Visit=18 (Stevenson, Domingues)		
		June 26: Burt Public Library Visit=24 (Evans, Kelly, Wright)		
		June 27: Lake City Public Library Visit=39 (Meerdink, Staudt, Mahaney)		
		June 29: North Grand Farmers Market, Ames=65 (Comito, Helmers, Domingues)		
		July 1: Dubuque Public Library, Peosta=43 (Andrews, Domingues, Juchems)		
		July 3: Readlyn Public Library=29 (Staudt, Wright, Evans)		
		July 9: Hospers Public Library=33 (Kelly, Mahaney, Meerdink)		
		July 11: Riceville Public Library=68 (Andrews, Domingues, Evans)		
		July 12: Eldon Public Library=28 (Stevenson, Staudt)		
		July 12: Monona County Fair, Onawa=51 (Juchems, Wright, Domingues)		

		July 13: North Iowa County Fair, Mason City=125 (Andrews, Wright, Maheny)		
		July 14: Marion County Fair, Knoxville=6 (Meerdink, Kelly)		
		July 16: Kossuth County Farm Bureau Appreciation Dinner, Algona=63 (Mahaney)		
		July 17: Adair County Fair, Greenefield=59 (Meerdink, Stevenson, Staudt)		
		July 18: Henry County Fair, Mt. Pleasant=38 (Wright, Domingues, Meerdink)		
		July 18: Wapello County 4-H Expo, Ottumwa=70 (Kelly, Juchems)		
		July 19: Clinton County Fair "Club Show", DeWitt=27 (Wright, Stevenson)		
		July 19: Storm Lake Public Library=11 (Evans, Kelly, Mahaney)		
		July 20: Osceola County Fair, Sibley=38 (Mahaney, Juchems)		
		July 21: Van Buren County Fair, Keosauqua=30 (Stevenson, Wright)		
		July 24: Louisa County Fair, Columbus Junction=67 (Andrews, Kelly, Meerdink)		



		July 25: Humboldt County Fair, Humboldt=48 (Stevenson, Kelly, Mahaney)		
		July 26: Des Moines County Fair, West Burlington=121 (Juchems, Kelly, Meerdink)		
		July 29: LeMars Public Library=98 (Stevenson, Andrews)		
		Aug. 24: Cedar Falls Energy & Environment Fair=608 (Stevenson, Juchems, Evans)		
		Sept. 10: O'Brien Co. 6 <sup>th</sup> Grade Outdoor Classroom, Sutherland=178 (Stevenson, Motschenbacher)		
		Sept. 13: National Cattle Congress, Waterloo=108 (Juchems, Evans, Staudt)		
		Sept. 20: Borlaug Inspire Day, Cresco=177 (Helmert, Staudt)		
		Sept. 20: Iowa Valley Community Schools, Marengo=205 (Motschenbacher, Stevenson, Juchems)		
		Sept. 24: Lime Springs Elementary School=34 (Stevenson, Evans)		
		Oct. 4: St. Cecilia After-school STEM club, Ames=56 (Juchems, Stevenson, Staudt)		

		Oct. 5: Colony Pumpkin Patch/North Liberty 100-Year Celebration, North Liberty=57 (Juchems, Kelly)		
		Oct. 10: Cherokee County 6 <sup>th</sup> Grade Outdoor Classroom, Quimby=232 (Juchems, Motschenbacher)		
		Oct. 10: Newell-Fonda Elementary School, Newell=176 (Stevenson, Evans)		
		Oct. 11: Penn Elementary School, North Liberty=86 (Stevenson, Staudt)		
		Oct. 15: CREP Wetland Tour with DMACC Environmental Science students, Dallas County=36 (Juchems, Motschenbacher)		
		Oct. 16: Epworth Elementary School, Epworth=129 (Stevenson, Evans)		
		Oct. 17: Tri-County PreK-3 <sup>rd</sup> Grade School Visit, Thornburg=92 (Juchems, Evans)		
		Oct. 25: West Fork High School Earth Science Class, Sheffield=24 (Juchems, Motschenbacher)		
		Nov. 7: Humboldt Elementary School, Humboldt=188 (Comito, Staudt)		
		Nov. 21: Cedar Valley STEM Festival, Waterloo=498 (Staudt, Stevenson, Juchems)		

**Legend of projects that are interconnected to ILF grant and co-fund activities:**

	ILF/PFI Cover Crops working group (IDALS)
	Community Assessments: Key Components to Successful Community-Based Watershed Improvement Projects (IDNR)
	Water Rocks! (IDNR)
	Leopold Center for Sustainable Agriculture grant
	USDA-NIFA Wetlands Project

Iowa Learning Farms grant only pays a portion of each of our five staff members' salaries. Without additional grants, we would not be able to keep our team together.

Submitted by: Drs. Jacqueline Comito, Matt Helmers on behalf of the Iowa Learning Farms Staff and Faculty

# OUTREACH/EDUCATION

## **Field Days/Events**

### **JANUARY-MARCH**

A series of cover crop field days and workshops were held in March (two are in April), in conjunction with Practical Farmers of Iowa including: Luzerne on March 19, Welton on March 21, Breda on March 22, Dedham on March 26, and Red Oak on March 28. Four of the workshops targeted EQIP program participants and these will be followed up with late summer field days in the same respective areas. The Northwest Iowa No-Till Conference, coordinated by ISU field agronomist Joel DeJong, was held on March 15 in Woodbury County. The conference focused on no-till as well as cover crops.

### **APRIL-JUNE**

This quarter, field days were sparse due to the wet spring and late planting. A couple of events scheduled during this quarter were postponed and will be rescheduled after harvest. The cover crop workshop series continued in early April, with public events on April 1 and 4. On April 2, a “train-the-trainer” event was held at the FEEL lab near Boone for those working with the CAP grant. A joint PFI cover crop field day was held on June 26 on the Jeff Pape farm near Dubuque.

Field days are being planned for July and August in Buena Vista, Des Moines, Decatur, Iowa, Page, Webster and Wright counties in which cover crops will be a primary topic of discussion. Follow-up EQIP field days will take place in Buena Vista and Iowa counties. Fayette County is also being targeted for a follow-up EQIP event in northeast Iowa.

### **JULY-SEPTEMBER**

Nine field days were conducted this quarter focusing on cover crops and the Nutrient Reduction Strategy. Attendance at these events ranged from 33 to 120 people with a total attendance of 705 people for these events. Also, ILF partnered with ISU Extension and Outreach for a meeting of 25 Extension field agronomists and agricultural engineers at the FEEL Farm on August 16th. The meeting focused on the Nutrient Reduction Strategy and included a field tour. These field days, as well as the upcoming events, are carefully planned to provide appropriate speakers, location, food and length of event. ILF strives to hold quality events, where high attendance numbers don't always indicate success.

Nine field days are being planned for October and November in Des Moines, Buena Vista, Butler, Grundy, Allamakee, Montgomery and Iowa counties in which cover crops will be a primary topic of discussion. Follow-up EQIP field days will take place in Des Moines and Iowa counties. A CREP Wetland tour is also planned for two environmental science sections from DMACC's Ankeny campus in Dallas County on October 15.

Although delayed planting and slow growing season led to the postponement of several field days to next spring or fall of 2014, there were as many field days as last year at this time. Attendees are showing great interest and good discussion over the topics covered.

### **OCTOBER-DECEMBER**

Seven field days were conducted this quarter with the majority occurring in a two-week period in early November. These fall field days focused on cover crops, soil health and the Nutrient Reduction Strategy. Attendance averaged 42, with a total of 300 attendees. With assistance from Shawn Richmond and Matt Lechtenberg, ILF was able to coordinate a CREP wetland tour for 36 DMACC environmental science students and their instructor. ILF also partnered with ISU Extension for two cover crop workshops in Northwest Iowa in early December with 50 and 39 in attendance, respectively.

Planning has begun for spring indoor workshops that will discuss a whole farm strategy for conservation including soil health, tillage and cover crops. A strip-till conference has been set Feb. 20 in northwest Iowa in coordination with ISU Extension and Outreach.

## **Conservation Station Fleet**

### **JANUARY-MARCH**

The trailers remained in closed storage for this quarter, located in the ISU hoop building on the Farm Progress Show grounds near Boone. Due to so much snow in March, the trailers weren't moved out until the last week of March. They will be prepped quickly in early April to hit the road. Meanwhile, in February, Staudt and Stevenson began to pull together the spring and summer schedules for the fleet. There are 28 events scheduled for spring (most of them in May) and 40 events for summer. The schedule is still open for summer.

### **APRIL-JUNE**

This spring proved to be challenging to our fleet as well as farmers. A good number of our events were cancelled, postponed or moved indoors due to late spring snow and excessive spring precipitation. Since then, the ILF staff and five undergraduate interns have been traversing the state with the Conservation Station fleet. This quarter the CS3 was used for 30 youth education events and two community events, the Big CS traveled to two community events and three field days while the Lil' CS covered the fourth field day and a visit to the Boone High School. The Lil' CS was also checked out for two separate events in late April. As of June 30, 3,631 people all across the state have visited a Conservation Station.

New for this summer is the addition of the youth soil module to accompany the CS3 to the 24 library visits over the summer. The 2013 summer reading theme is “Dig into Reading” and the new module helps tie in the importance of Iowa’s great soils. Kids start at the Soil Caldron where they follow a recipe to make soil. They add different ingredients that represent parent materials, organic matter, nutrients, earthworms and other organisms, bacteria, water, sunlight, and most importantly time. Once they learn that it takes a long time to form soil, they head to the rainfall simulator to learn about some options being used on Iowa’s landscape to protect the soil. The final station is by far the most popular – edible soil. Kids are able to build soil they can eat by adding layers of M&Ms (parent material), pudding (subsoil), crushed Oreos (topsoil), multi-colored sprinkles (organisms), gummy worm (earthworms) and yellow sprinkles (residue).

### **JULY-SEPTEMBER**

The ILF staff and interns were busy this quarter traveling the state with the Conservation Station fleet. This quarter, a Conservation Station trailer was at 16 community events and county fairs, two conferences, five field days and 13 youth education events. The Lil’ CS was also checked out for three separate events. Between July and September, over 5,000 people across the state have seen one of the CS fleet.

The 2013 national public library summer youth program theme was “Dig into Reading.” A new soil module was created for youth to help illustrate the importance of Iowa’s great soils. This module was used at 26 public libraries across the state and 1,476 children and parents participated in our visits. The module is in the process of being developed into a module for future classroom visits.

### **OCTOBER-DECEMBER**

The weather permitted travel with the CS fleet for the first few weeks of the fourth quarter. During those two weeks, we attended seven youth education events and the Lil’ CS was checked out for a two-day event in Boone County. By the end of 2013, the CS fleet had been viewed by 8,110 people all across the state. The fleet was winterized for the year at the end of October. After eight years traveling around the state, the Lil’ CS original trailer is being retired. We have replaced it with a trailer similar to the CS3 and the new Lil’ CS will be ready to roll in spring 2014. Already 50 requests had been submitted for appearances in spring and summer of 2014.

## **ELECTRONIC OUTREACH**

### **Webinars**

The webinars originate from the Brenton Center on the ISU campus the third Wednesday of each month at 11:30 a.m., and are archived on the ILF website.

## **JANUARY-MARCH**

The webinars for this quarter included a presentation by Dr. Jon Wolseth “The State’s Role in Water Quality: Soil and Water Conservation District Commissioners and the Agricultural Status Quo” in January. In February, Leopold Center Director Mark Rasmussen provided an update on the Leopold Center’s work, and in March, ISU Assistant Scientist Dan Barker offered information on “New Technologies for In-Season Nitrogen Management.

## **APRIL-JUNE**

The webinars for this quarter included a presentation by Andy Larson, ISU Extension and Outreach small farm sustainability program manager. He is also the Iowa representative for Sustainable Agriculture Research and Education (SARE). He spoke about the SARE program and the grants available for farmers and organizations. May’s webinar featured Tony Toigo (IDALS) and Patti Cale-Finnegan (IDNR) who presented information about the State Revolving Loan, its purpose and who is eligible to use it. June featured Lois Wright Morton who reviewed water quality perceptions in our state.

## **JULY-SEPTEMBER**

The webinars for this quarter included a presentation in July by ISU agronomy professor Michael Castellano. He discussed soil sustainability and the importance of soil organic matter. August webinar presenters were from the Iowa Department of Agriculture and Land Stewardship, Jim Gillespie and Shawn Richmond covered the Iowa Nutrient Reduction Strategy’s goals. In September webinar attendees learned more about Water Rocks! from Jacqueline Comito and Ann Staudt. On September 23, a special webinar was held with the SWCD commissioners and secretaries as the target audience. Vince Sitzman and Clare Lindahl explained about the changes in local district banking policies.

## **OCTOBER-DECEMBER**

There were only two webinars this quarter as the federal government shutdown rippled down to ILF. The October scheduled presenter, Mark Tomer, is a federal employee, thus could not do the webinar. He has been rescheduled for February 2014. November’s presenter was Jerry Hatfield, also a federal employee, who provided great information about the affects of climate change on soil, water, crops and the atmosphere. December’s webinar featured Bill Crumpton, who discussed CREP wetlands and how they worked to removed nitrates from field runoff. Both presentations contained a high amount of information and were well received.

## WEBINAR PARTICIPATION TOTALS (as of 1/6/14)

### 2013 Webinars (live + archived):

January (Wolseth, Comito) = 403 (97+306)	June (Morton) = 106 (23+83)	Sept. 23 = 264 (108+156)
February (Rasmussen) = 151 (27+124)	July (Castellano) = 280 (43+237)	(special webinar by Clare Lindahl, CDI and Vince Sitzman, IDALS)
March (Barker) = 152 (38+114)	Aug. (Gillespie & Richmond) = 206 (59+147)	November (Hatfield) = 241 (21+220)
April (Larson) = 99 (33+66)	September (Comito & Staudt) = 142 (49+93)	December (Crumpton) = 93 (36+57)
May (Toigo, Cale-Finnegan) = 118 (24+94)		

### 2012 Webinars (live + archived):

January (Comito) = 209 (16+193)	May (Helmers) = 180 (27+153)	September (Liebman) = 208 (25+183)
February (Hart) = 210 (19+191)	June (Moore) = 161 (11+150)	October (Arbuckle) = 135 (16+119)
March (Laird) = 305 (26+279)	July (Anderson) = 265 (17+248)	November (Kaleita) = 411 (28+383)
April (Adcock) = 170 (22+148)	August (Northey) = 166 (27+139)	December (Kult) = 327 (46+281)

### 2011 Webinars (live + archived):

January (Comito) = 395 (30+365)	May (Christianson) = 655 (31+624)	September (Cox) = 291 (25+266)
February (Anderson) = 302 (39+263)	June (Soupir) = 244 (29+215)	October (Hanna) = 107 (11+96)
March (Singer) = 529 (37+492)	July (Heaton) = 292 (13+279)	November (Petersen) = 164 (15+149)
April (Helmers) = 339 (33+306)	August (Cruse) = 677 (53+624)	December (Harr) = 157 (14+143)

## Blog/Facebook

[www.iowalearningfarms.wordpress.com/](http://www.iowalearningfarms.wordpress.com/)

### JANUARY-MARCH

The ILF blog site is gaining followers as well as the ILF Facebook page. The blog postings also appear on the Facebook page, which creates activity and “likes.” As of April 1, the blog has had 6,049 views of the 99 posts by ILF team members. The blog is followed by 247 people and counting. This additional format for outreach works well to inform others of experiences that may seem out of place in a news article. The blog is informative and humorous and offers a personal side to why soil and water quality are important.



### **APRIL-JUNE**

Since April 1, the number of “Likes” on our Facebook has grown by 20 to reach 201 which helps promote the blog posts and distribute photos from summer events. As of June 30, the blog has had 7,402 (up 1,353) views of the 116 (up 17) posts by ILF team members. The blog is followed by 276 (up 29) people and counting. This additional format for outreach works well to inform others of experiences that may seem out of place in a news article. The blog is informative and humorous and offers a personal side to why soil and water quality are important.

### **JULY-SEPTEMBER**

The ILF team has been posting a variety of topics to offer something for all followers. As of September 30, there are 211 Facebook followers, and the blog has had 9,425 views (up 2,023) of the 140 (up 24) posts by ILF team members. The blog is currently followed by 298 people (up 22).

### **OCTOBER-DECEMBER**

Since October 1, the number of “Likes” on Facebook has grown to 229. As of December 31, the blog has had 11,382 views (up 1,938) of the 164 posts by ILF team members. The blog is followed by 331 people and counting. This additional format for outreach works well to inform others of experiences that may seem out of place in a news article. The blog is informative and humorous and offers a personal side to why soil and water quality are important.

## Website

The numbers below indicate how many page views and how many “unique” visitors there were on our website each month via Google Analytics.

<b>January 2013</b>	<b>February 2013</b>	<b>March 2013</b>
Visits: 337	Visits: 296	Visits: 414
Page Views: 495	Page Views: 403	Page Views: 539
Unique visitors: 174	Unique visitors: 159	Unique visitors: 222
New Visitors: 117 visits	New Visitors: 97 visits	New Visitors: 160 visits
Returning Visitors: 220 visits	Returning Visitors: 199 visits	Returning Visitors: 254 visits

<b>April 2013</b>	<b>May 2013</b>	<b>June 2013</b>
Visits: 316	Visits: 331	Visits: 266
Page Views: 404	Page Views: 428	Page Views: 347
Unique visitors: 180	Unique visitors: 182	Unique visitors: 135
New Visitors: 39.9%	New Visitors: 40.5%	New Visitors: 34.6%
Returning Visitors: 60.1%	Returning Visitors: 59.5%	Returning Visitors: 65.4%

<b>July 2013</b>	<b>August 2013</b>	<b>September 2013</b>
Visits: 311	Visits: 342	Visits: 333
Page Views: 403	Page Views: 434	Page Views: 432
Unique visitors: 168	Unique visitors: 168	Unique visitors: 183
New Visitors: 65%	New Visitors: 68.7%	New Visitors: 63.4%
Returning Visitors: 35%	Returning Visitors: 31.3%	Returning Visitors: 36.6%

<b>October 2013</b>	<b>November 2013</b>	<b>December 2013</b>
Visits: 397	Visits: 340	Visits: 356
Page Views: 525	Page Views: 450	Page Views: 455
Unique visitors: 209	Unique visitors: 225	Unique visitors: 226
New Visitors: 60%	New Visitors: 54%	New Visitors: 54%
Returning Visitors: 40%	Returning Visitors: 46%	Returning Visitors: 46%

**Conservation Pack website:**

<b>January 2013</b>	<b>February 2013</b>	<b>March 2013</b>
Visits: 94	Visits: 206	Visits: 71
Page views: 238	Page views: 277	Page views: 119
Unique visitors: 73	Unique visitors: 62	Unique visitors: 63
New visitors: 67	New visitors: 54	New visitors: 61
Returning visitors: 27	Returning visitors: 152	Returning visitors: 10

<b>April 2013</b>	<b>May 2013</b>	<b>June 2013</b>
Visits: 105	Visits: 127	Visits: 92
Page views: 378	Page views: 506	Page views: 323
Unique visitors: 82	Unique visitors: 97	Unique visitors: 80
New Visitors: 28.6%	New Visitors: 28.3%	New Visitors: 20.7%
Returning Visitors: 71.4%	Returning Visitors: 71.7%	Returning Visitors: 79.3%

<b>July 2013</b>	<b>August 2013</b>	<b>September 2013</b>
Visits: 93	Visits: 70	Visits: 77
Page views: 256	Page views: 226	Page views: 163
Unique visitors: 57	Unique visitors: 55	Unique visitors: 71
New Visitors: 52.7%	New Visitors: 74.3%	New Visitors: 87%
Returning Visitors: 47.3%	Returning Visitors: 25.7%	Returning Visitors: 13%

<b>October 2013</b>	<b>November 2013</b>	<b>December 2013</b>
Visits: 106	Visits: 87	Visits: 34
Page views: 318	Page views: 196	Page views: 73
Unique visitors: 94	Unique visitors: 79	Unique visitors: 31
New Visitors: 83%	New Visitors: 83%	New Visitors: 88%
Returning Visitors: 17%	Returning Visitors: 17%	Returning Visitors: 12%

## YouTube activity

### TOTAL VIEWS (as of 1/6/14)

<b>Converting Your Planter for No-Till (posted 12/11/09)</b>	<b>Views</b>
Conclusion	1,250
Furrow Point Maintenance	1,288
Fertilizer Applicators	2,128
Row Cleaners	5,353
Closing Systems (Case IH)	6,250
Closing Systems	1,693
Depth Adjustment (Case IH)	3,659
Depth Adjustment	693
Seed Opener (Case IH)	3,567
Seed Opener	22,166
Intro and Leveling	10,868
<b>Culture of Conservation Videos (posted 11/12/09)</b>	<b>Views</b>
The Work of our Hands	235
Don't Call it Dirt: A Passion for Soil	10,335
A Culture of Conservation: Iowan to Iowan	309
Water is Life	2,157
We All Have a Place in the Watershed (posted 5/21/09)	447
Reclaiming Stewardship (posted 4/9/09)	181
<b>Troubled Waters (posted 3/24/10)</b>	<b>Views</b>
Play All version (posted 10/7/11)	643
Part 1: Natural Resources and Biodiversity	524
Part 2: Human Intervention & Modification	484
Part 3: Pollutants	182
Part 4: Ecological Resilience	484

Part 5: Blessed be the River	452
<b>Conservation Station (posted 5/1/11)</b>	<b>Views</b>
Promotional film for the CS	766
<b>Cover Crop How-To (posted 7/18/11)</b>	<b>Views</b>
Part I – planting	899
Part II – terminating	370
<b>Implementing Grassed Waterways (posted 7/18/11)</b>	<b>Views</b>
Part 1: The need for waterways	68
Part 2: Conservation practices	75
Part 3: Design considerations	165
Part 4: Waterway capacity	257
Part 5: Establishing a waterway	140
Part 6: Financial Assistance	63
Part 7: Waterway maintenance	112
Part 8: A Farmer’s Perspective	106
<b>Manure Management and Conservation (posted 7/18/11)</b>	<b>Views</b>
Part 1: Managing Manure Nutrients for Crop Growth	153
Part 2: Sampling Liquid Manure	182
Part 3: Sampling Open Lot Manure	122
Part 4: Sampling Stockpiled & Composted Manure	186
Part 5: Manure Sample Analysis	105
Part 6: The Value of Manure Nutrients	479
Part 7: Injection Equipment	1,229
Part 8: Putting It All Together	208
Play All version	702
<b>Out to the Lakes (posted 9/29/11)</b>	<b>Views</b>
Posted in its entirety	706

<b>Land Formation in Iowa (posted 6/29/12)</b>	<b>Views</b>
Animated illustration of Iowa land from past to future based on alterations	663
<b>Strip-tillage Crop Management (posted 10/12/12)</b>	<b>Views</b>
Part 1	1,866
Getting Started with Strip-till: Equipment	506
Getting Started with Strip-till: Tractor Horsepower	275
Getting Started with Strip-till: Soil Structure	115
Strip-till and Your Fertilizer Program	732
Strip-Till Recommendations	553
<b>Conservation Station-Rainfall Simulator (posted 11/5/12)</b>	<b>Views</b>
Matt Helmers demonstrates the RS	686

## **OTHER OUTREACH**

### **JANUARY-MARCH**

- The partner pages on the new website continue to be updated.
- Winter 2013 Newsletter was written, designed, printed and distributed.
- Promotional material for March and April field days were written, designed and distributed, including news releases, flyers and postcards.
- Three *Wallaces Farmer* columns plus a feature story on Rob Stout were submitted and published.
- ILF mailing lists were cleaned up, switched from USPS to electronic and updated for newly elected officials including legislators and SWCD commissioners.
- ILF press releases and references to ILF were found on these media websites: *Farm News*, *Iowa Farmer Today*, *Farm Bureau Spokesman*, *AgriNews*, *Des Moines Register*, *Cedar Rapids Gazette* and their sponsored web page Eastern Iowa Life, Agriculture is America website (agisamerica.org), AgWeb.com (Farm Journal website), *Wallaces Farmer*, Leopold Center, Practical Farmers of Iowa, ISU Extension and Outreach; other Iowa newspapers include Benton, Iowa and Poweshiek counties' newspaper website "Your Weekly Paper.com", Sigourney News Review, and River Cities' Reader website.

- ILF coordinated session tracks for the PFI conference on January 10-12, 2013. Three ILF farmer partners: Rob Stout, Mark Thompson and Robert Lynch served as session speakers. Additional featured speakers include: Keegan Kult with the Iowa Soybean Association, Agri-Drain representative Randy Hoyt, USDA-ARS soil scientist Dan Jaynes, USDA-NLAE research agronomist Tom Kaspar, and ISU Extension soil fertility specialist John Sawyer. They focused on practices presented in the Iowa Nutrient Reduction Strategy including strip-tillage, cover crops, shallow drainage, bioreactors, re-saturated buffers, and remote N sensing technologies. Southern Minnesota farmer Tony Thompson presented a whole-farm conservation case study of his family farm.
- Matt Helmers and Mark Hanna participated in the crop advantage series in January, speaking to audiences about drainage, and tillage and productivity.

#### **APRIL-JUNE**

- Promotional material for Conservation Station visits and field days were written, designed and distributed, including news releases, flyers and postcards. Beginning this quarter, emails were sent to county Extension offices notifying them that the Conservation Station would be in their county that week. It also serves as an invite for Extension staff to visit and see what ILF is doing at these public events.
- Three *Wallaces Farmer* columns submitted and published.
- ILF press releases and references to ILF were found on these media websites: *Farm News*, *Iowa Farmer Today*, *Farm Bureau Spokesman*, *AgriNews*, *Des Moines Register*, *Cedar Rapids Gazette* and their sponsored web page Eastern Iowa Life, *Wallaces Farmer*, Leopold Center, Practical Farmers of Iowa, ISU Extension and Outreach. Other newspapers include *High Plains Journal*, *Fort Dodge Messenger*, *Muscatine Journal*, *Agri-View*; website: Your Riverside Forum; radio: Algona radio KLGA.
- A new DVD duplicator is in action, burning DVDs for field days and for libraries. We are in process of mailing the Culture of Conservation series to all Iowa public and academic libraries for them to lend to their patrons.
- Comito, Dr. Jon Wolseth and Lois Wright Morton's article "Stewards and Businessmen? 'Existential Recognition' Among Farmers in an Age of Environmental Uncertainty," has been accepted for publication in *Human Organization* and will be published in December. This is our third published article this year. The articles will be linked on the ILF website after they are published. We will also make copies available to members of the ILF Steering Committee.

#### **JULY-SEPTEMBER**

- How-to and "Culture of Conservation" DVDs were distributed at field days, in mailings, and by request. This quarter, the "Culture of Conservation" DVDs were sent to 64 Iowa academic libraries and to 420 Iowa public libraries in July. The academic libraries and larger community libraries (118) also received copies of *Water Quality Matters To Us All*. This quarter, 34 DVDs were mailed to those

requesting and close to 400 were given out at field days, workshops, and to Practical Farmers of Iowa for distribution through their requests and events.

- At the Midwest Environmental Educators Conference in September, 80 *Water Quality Matters To Us All* books were given out in addition to the library mailing. Remaining inventory is approximately 200 books.
- Promotional material for field days and Conservation Station visits were written, designed and distributed, including news releases, flyers and postcards. News releases were also emailed to Extension and SWCD offices and legislators in the vicinity of each field day. Also, E-mails were sent to county Extension offices notifying them that the Conservation Station would be in their county that week.
- Three *Wallaces Farmer* columns submitted and published.
- ILF press releases and references to ILF were found on these media websites: *Farm News, Iowa Farmer Today, Farm Bureau Spokesman, AgriNews, Des Moines Register, Cedar Rapids Gazette* and their sponsored web page Eastern Iowa Life, *Wallaces Farmer*, Leopold Center, Practical Farmers of Iowa, ISU Extension and Outreach. Other media include *Fort Dodge Messenger, LeMars Daily Sentinel, Mitchell County Press News, Osceola Sentinel Tribune, Ottumwa Courier, Akron Hometown*; Agriculture is America website, KTVO-TV (Kirksville, Mo/Ottumwa), and KICD AM radio.
- Op-Ed articles: The first in the series of monthly opinion articles were sent in September to daily newspapers, as well as on the ISU Extension site for staff for local field staff to submit to their newspapers.
- Drs. Wolseth, Wright Morton and Comito got their third journal article accepted for publication in *Human Organization* this quarter. Comito and Wolseth are working on a fourth article using the Black Hawk Lake watershed data as the basis of analysis.

## **OCTOBER-DECEMBER**

- The five how-to DVDs, 190 total, were distributed at the fall field days and WFAN conference. Also 10 “Culture of Conservation” DVDs were given out at the WFAN conference.
- *Water Quality Matters To Us All* was popular this quarter. Five copies were handed out at the WFAN conference and 15 copies were sent to an individual who requested copies via email. She gave these to her county supervisors, her state representative and other “concerned citizens” in her community. Also 20 copies were given out at the Extreme Weather Adaptation symposium, where Comito served on one of the speaker panels.
- Promotional material for the cover crop field days were written, designed and distributed, including news releases, flyers and postcards. News releases were also emailed to Extension and SWCD offices and legislators in the vicinity of each field day. Also, E-mails were sent to county Extension offices notifying them that the Conservation Station would be in their county.



- Three *Wallaces Farmer* columns submitted and published and three op-ed articles on the Nutrient Reduction Strategy were published in newspapers across Iowa.
- ILF press releases, op-ed articles, and references to ILF were found on these media websites: *Farm News, Iowa Farmer Today, Farm Bureau Spokesman, AgriNews, No-till Farmer, Des Moines Register, Cedar Rapids Gazette, Wallaces Farmer, Leopold Center, Practical Farmers of Iowa, ISU Extension and Outreach*. Other media include *Fort Dodge Messenger, Post-Bulletin, Waterloo-Cedar Falls Courier, Storm Lake Times, Mapleton Press, Muscatine Journal*, the Soil and Water Conservation Society newsletter, the Big Creek Advisor (Big Creek Lake Watershed Project newsletter), and the Iowa NRCS employee newsletter.

## ADMINISTRATION AND EVALUATION

### JANUARY-MARCH

The Iowa Learning Farms program is such a well-oiled machine with an outstanding, engaging and motivated staff that Helmers' and Comito's time is able to be spent writing grants and seeking additional funding to help keep the program growing. This semester, the team wrote two grant proposals to expand our cover crop work: national CIG pre-proposal and SSCC cover crop proposal. If accepted to write the full proposal, that would be due in May. In addition, we will be writing a state CIG for a cover crop project.

In addition, Comito and Stevenson sent out follow-up evaluations to all attendees at 2012 ILF field days. The purpose of the follow-up evaluation was to discover what actions, if any, people took as a result of the information gained at our field days. We had an excellent response to the first evaluations (46%) and the follow-up evaluations (42%). The results are in a separate report that was distributed to the ILF Steering Committee in February. We are also beginning our evaluation of first quarter field days for 2013.

Undergraduate interns play a critical role in Iowa Learning Farms' operations during the summer months! Three of our outstanding students from 2012—Becca Meerdink, Patrick Kelly, and Mikah Wright—will be joining ILF again in 2013. Three new student interns have been hired. Ann Staudt will be conducting weekly training sessions for the students—one night per week, beginning April 2—to prepare student interns for their work in building a culture of conservation and how to effectively communicate soil and water issues in our outreach efforts across the state. As many of you know, our ISU student interns are important to our outreach and serve as wonderful ambassadors for ISU and ILF. We find that participants at events love to talk to these students, to see them active in our program and to hear their stories.

## **APRIL-JUNE**

The Iowa Learning Farms program continues to be a well-oiled machine (albeit a wet one this quarter). Helmers' and Comito's time spent writing grants and seeking additional funding to help keep the program growing. This semester, the team wrote two grant proposals to expand our cover crop work: national CIG proposal and a State CIG cover crop proposal. We also spent this quarter developing a cover crop mixture research project to begin this fall on five farmer association farms. Because of the wet spring and early summer, many of the field days were postponed and events moved inside when possible. Every year offers lots of challenges in terms of the weather.

Evaluation work continues. Comment cards were collected for the first nine field days spanning from March to June. Evaluations for these field days and events were mailed out to 497 participants of the field days during this period. The evaluations are being returned at a steady pace offering feedback to this year's events. All of the school and library events were also evaluated.

Through our related program Water Rocks!, we partnered up with 24 Iowa libraries for this year's youth summer reading programming. The 2013 program theme is "Dig into Reading" and the Conservation Station has a new set of activities devoted to learning about soil. The fleet of Conservation Stations continues to be in much demand and we still turn down 25% of the requests we get because of limited time and staffing.

Ann Staudt and Becca Meerdink organized and conducted a spring training session with the student interns, meeting with them each Tuesday night for five weeks at the end of the spring semester. This allowed the student interns to hit the ground running immediately after completing final exams, coinciding with the peak season for school visits and outdoor classrooms, with each intern attending multiple Conservation Station events their first week on the job. Intern training continues through the summer with a series of Lunch n' Learn seminars (a new addition this year) presented by ILF team members on a variety of topics including biological indicators, urban conservation, building a culture of conservation, and cover crops.

## **JULY-SEPTEMBER**

In August, long time ILF staffer Aaron Andrews left us to take a new opportunity in eastern Iowa. Aaron was instrumental in helping us create the Conservation Station. For the last year, he had been doing a good job in the role of field coordinator. Elizabeth Juchems has taken over as ILF events coordinator, including field days, and temporarily helping with fieldwork coordination as we conduct a search for a new team member. We are also fortunate to have Jill Motschenbacher, PhD in soil science, to help in the cover crop data analysis. Dr. Motschenbacher will be with us until the end of the year. We had strong applicants for our position and hope to have a new person start in January.

During this quarter, we also made the decision to replace the Lil' CS. It is our original trailer and has traveled more miles than any of us. We decided that it is more cost-effective to get a new trailer than to continue repairing the old trailer. We will use the old trailer for supplies. The new Lil' CS will be available for checkout by our partners.

Our third quarter always brings us a lot of evaluation work. We sent 461 evaluations to those people who attended our field days this quarter and filled out a comment card. This is not the total number of people who have attended field days. To date, 958 field day evaluations have been mailed—approximately 40% of them have been returned. We will send a follow up evaluation to all those attendees in January to see if they have changed their behavior and adopting conservation practices.

### **OCTOBER-DECEMBER**

This last quarter was a time of transition for the ILF team. We are constantly evaluating our staffing and adjusting their responsibilities based on their skill sets and the need of our various work plans and projects. With this in mind, we split the responsibilities of the field coordinator and we will no longer have someone serving in that role. Instead, Elizabeth Juchems has become our events coordinator, which includes field days, workshops, conferences, classroom events, etc. In addition, we hired an educator and demonstration coordinator: Eric Britt Moore. Britt started work with the team on December 2. He earned his master's degree in crop production and physiology and sustainable agriculture from ISU in 2012. He worked with Tom Kaspar at the National Laboratory for Agriculture and the Environment as part of his master's research on cover crops. Prior to working with ILF, Britt taught high school science in Jacksonville, Florida.

This quarter we also submitted three grants proposals as we seek to diversify our funding portfolio, including a two-year ILF funding request to IDNR for 2015-2016.

**Evaluation:** Stevenson was busy analyzing and processing all of the 2013 evaluation data this quarter. This data includes the evaluations that are sent two weeks following each event to every field day attendee who completed a comment card, and the staff event evaluations. In January, we will send a follow-up evaluation to all those who received the two-week evaluation to see if they did indeed change their behavior. In past years, all field days are evaluated on these multiple levels. However, this year, due to the late nature of the field days in October and November, we modified the two-week evaluation so that the questions were more aligned with the January evaluation. We received 157 comment cards from the seven field days in October and November. That information will be analyzed in the final report that will be published in February. In total, we evaluated 28 field days/workshops in 2013. We had a 49% response rate to the initial evaluation

(which great for a single mailed survey) and anticipate a high response to the follow-up evaluation in January. A preliminary summary was produced for discussion at the Steering Committee meeting in November.

In December, follow-up questionnaires were printed and prepared to mail to every 2013 field day attendee who filled out a comment card. A total of 1,031 letters will be mailed at the beginning of January. The results of the questionnaire will be included in the final Iowa Learning Farms Evaluation Report for 2013.

We also evaluate all the outreach/educational events we attend in which we play a significant role. We are processing all the evaluation materials from youth and community events including the teacher evaluations we received. The staff makes note of the following information at each event: type of event, type of audience, attendance, engagement of audience, and which staff participated. This helps us evaluate the type of events we do, our impact with those who attend, and how we adjust for the next year. It also helps to make sure we don't put too much attention on any one group, location or age. For classroom visits, each teacher receives a packet of teaching materials as well as an evaluation survey. The evaluations include how the teachers scored our presentation, what more could have been done, and if/how they plan on using the materials that we provided.

# WORK WITH DEMONSTRATIONS, RESEARCH & LEVERAGED PROJECTS

## **ILF Demonstrations**

### **APRIL-JUNE**

Last quarter, ILF began planning for at least six new on-farm demonstrations to begin in 2013. Nathan Anderson (Cherokee Co.), Craig Fleishman (Dallas Co.), Sam Spellman (Dallas Co.), Bob Lynch (Humboldt Co.), Mark Thompson (Humboldt Co.), Tim Palmer (Madison Co.), and Seth Watkins (Page Co.) are interested in taking part in this demonstration project. The project will feature the performance of conservation practices as related to the Nitrogen Science Assessment and Iowa's Nutrient Reduction Strategy. Demonstrations will highlight select cover crops after seed corn, cover crops and grazing, on-farm prairie strips integrated with row crops, strip-tillage and nutrient management, and extended crop rotations utilizing small grain and winter cover crops. Data collected may include but not limited to: aboveground biomass, soil nitrate measurement, stand counts, residue measurement and crop grain yield.

A visiting scientist from India, Konduri Venkata Shashank, worked this quarter on whole farm modeling. Using ArcGeoWEPP and RUSLE2 programs and farm management data gathered previously, Shashank was able to validate previous model results and gather further data to validate future model runs for Floyd and Muscatine counties.

### **JULY-SEPTEMBER**

During this quarter there were personnel changes within ILF staff. Aaron Andrews resigned in early August to take another position closer to his hometown. Dr. Jill Motschenbacher began on August 12.

Jill is helping out with cover crop research and travels with the Conservation Station events and school visits. Her work has focused on organizing and processing the five-year results from three on-farm cover crop trials that were established in 2009. Samples were collected and evaluations were made on the three sites for total carbon, total nitrogen, soil pH, microbial biomass, and water infiltration. In 2014, five more on-farm sites, which were established in 2010, will be sampled and evaluated similarly for changes in soil properties over time. The measured evaluations of cover crop trials and the statistical interpretations of data collected this year and during the project will be made publically available through a series of oral presentations and written publications in the coming months.

Through funding from the Leopold Center for Sustainable Agriculture, ILF established research and demonstration plots with cover crop mixtures on six ISU-farmer association farms around the state in the third quarter. The sites include: Northwest at Sutherland, Northern at

Kanawha, Northeast at Nashua, Southwest-Armstrong at Lewis, Southeast at Crawfordsville, and McNay at Chariton. The plots compare three treatments: no cover crop, single species cover crop, and a mixture cover crop. Each treatment is replicated four times at each site, for a total of 24 plots at each farm. Preceding the corn crop the single species is oats and the mix contains hairy vetch, oats, and radish. Preceding the soybean crop the single species is rye and the mix contains rapeseed, rye, and radish. The sites were hand-planted between August 20th and August 28th. The sites have all since received rain and there is germination of the rye and oats at Lewis, Chariton, and Nashua. Soil sampling for total nitrogen, total carbon, organic matter, pH and bulk density are scheduled to begin at the end of October or early November.

## **ILF/PFI Iowa Cover Crop Working Group (ICCWG)**

### **JANUARY-MARCH**

Due to the high interest in cover crops and demand for knowledge, the Iowa Cover Crop Working Group met twice in this quarter to discuss future directions for the group and plans to acquire further grant funding for expansion. Participants present in at least one of the meetings included: Jackie Comito, Matt Helmers, Aaron Andrews, Matt Lechtenberg, Tom Kaspar, Keith Kohler, Sarah Carlson, Jamie Benning, Mark Licht, and Andy Lennsen. ILF provided the group with a packet of materials including the 2012-2013 work plan, list of cooperators and measurements currently being taken, and details covering 2010–spring 2013 ILF cover crop outreach.

On March 14, ICCWG members met with Hagie Manufacturing representatives Amber Kohlass and Kevin Marshall at the Hagie production facility in Clarion to share ideas and exchange information. Jim Gillespie (IDALS), along with Richard Bednarek and Barbara Stewart (USDA-NRCS) were added to the cover crop working group at this time. Eagle Grove farmer Tim Smith and USDA-ARS agricultural science research technician Ben Knutson were also present.

Six cover crop workshops/field days were held this quarter with ILF providing food and promotion. Most of the field days evolved into workshops due to weather conditions forcing the event indoors. They were all deemed successful as turnout was excellent. Total attendance for these events is at 582, proving that the topic of cover crops is of great interest in Iowa.

### **APRIL-JUNE**

In this second quarter, two cover crop meetings were held at the FEEL laboratory, located eight miles west of Ames. The focus of these meetings was directed toward educational needs by field agronomists, watershed specialists and other technical advisors who work directly with agricultural producers. Attendance at the two meetings was at 50 and 25 people, respectively. Field days are being planned this quarter

for July and August in Buena Vista, Des Moines, Decatur, Iowa, Page, Webster and Wright counties in which cover crops will be a primary topic of discussion.

The ICCWG is working to establish research and demonstration plots with cover crop mixtures on five ISU-farmer association farms around the state in the third quarter. This quarter, several members of the group met to discuss details and begin planning for the proposed project. Three grant proposals involving cover crops were written and submitted this quarter as well.

### **JULY-SEPTEMBER**

This quarter, ILF coordinated seven field days with cover crop focus in Webster, Buena Vista, Decatur, Davis, Hamilton, Boone, and Keokuk counties. Aaron Andrews presented about ILF cover crop projects at the Fremont County cover crop meeting on July 31 in cooperation with Practical Farmers of Iowa and Iowa NRCS. Staff also provided rainfall simulator demonstrations to compliment four cover crop sessions held by ISU Extension field agronomist Joel DeJong on August 22 in Sioux County, in addition to cover crop field days in Taylor County on August 29th and Polk County on September 25th. Field days are being planned for October and November in Des Moines, Butler, Grundy, Allamakee, and Montgomery counties in which cover crops will be a primary topic of discussion.

### **OCTOBER-DECEMBER**

This quarter, ILF coordinated seven field days with a cover crop focus in Des Moines, Buena Vista, Iowa, Butler, Allamakee, Montgomery, and Grundy counties. Juchems and Moore provided information about ongoing ILF cover crop projects at two Northwest Iowa cover crop meetings led by ISU Extension field agronomist Joel DeJong. Indoor cover crop workshops are in the planning stages and will focus on cover crops as a tool within a whole farm conservation strategy.

A new cover crop cost calculator tool was developed and posted online that allows producers to directly compare the cost of drilling or aerial seeding a single species or a mix of up to six varieties of cover crops. The tool is an Excel file and is available for download on the cover crops page of the ILF website.

In response to the large number of first time cover crop farmers, the Iowa Cover Crop Consortium was formed with representatives from the ICCWG to provide materials and guidance. First time cover crop farmers were paired with a local “cover crop champion farmer” and received a copy of *Cover Crops in Iowa: A Quick Guide*. Each county NRCS office was given the same materials that each farmer received and are being encouraged to hold informal meetings to discuss cover crops.

A cover crop DVD was produced and will be ready for distribution at the Practical Farmers of Iowa Conference in January. The DVD is titled “Cover Crops: Farmer Perspectives.” ILF staff reviewed hours of farmer interviews and edited them into four different chapters totaling roughly 30 minutes. The chapter titles include: Why choose cover crops, Getting started, seeding methods and management, Growing cover crop seed, and Grazing cover crops. A leaflet was created to include with the DVD packaging.

## **SSCC/Leopold Center Cover Crop Project**

### **JANUARY-MARCH**

On-farm demonstration work continues with 10 farmer partners in Butler, Greene, Guthrie, Ida, Shelby, Tama, Taylor, Washington (two farmer partners) and Webster counties. Cooperators were compensated for seed and aerial application costs this quarter. Last quarter we began planning for spring infiltration and soil quality sampling. Leopold Center funds helped to purchase Cornell sprinkler infiltrimeters to conduct infiltration measurements at cooperator sites as they hit the five-year mark. Four of the 10 sites have completed five years; soil and infiltration measurements will be collected next quarter, between the time of spring cereal rye termination and subsequent 2013 row-crop planting.

### **APRIL-JUNE**

Infiltration measurements were collected between the time of spring cereal rye termination and subsequent 2013 row-crop planting at four cooperator sites as they hit the five-year mark with this project. Also taken at this time were spring aboveground biomass and microbial biomass extractions. Sarah Carlson (PFI) will be contacting all cooperators as they reach the five-year mark to assess their interest in continuing with the project.

### **JULY-SEPTEMBER**

Four partners are gathering the fifth year of yield information this fall. The remaining six partners will be planting rye for the fifth year. Six of the farmer partners, Greene, Butler, Guthrie, Ida, Washington and Taylor, have agreed to continue the project to gather longer term results and continue to demonstrate cover crops in their areas. Rye seed was delivered on September 24th and October 2nd to our farmer-partners in Taylor and Butler County for the use in the ongoing demonstration.

### **OCTOBER-DECEMBER**

Yield data continues to be reported and planning for spring data collection for the six sites completing their fifth year of the study has begun. An additional partner agreed to continue the study for a total of seven farmer partners. Greene, Butler, Guthrie, Ida, Washington (2) and



Taylor counties' farmer partners have agreed to continue the project to gather longer-term results and continue to demonstrate cover crops in their areas.

## **National CIG**

### **OCTOBER-DECEMBER**

The ICCWG established research and demonstration plots with cover crop mixtures on six ISU-farmer association farms around the state in the third quarter. Soil sampling for total nitrogen, total carbon, organic matter, pH and bulk density started on November 4 and was completed November 15. The samples are now being air-dried and will soon be submitted for processing. Due to a severe lack of rainfall after the sites were seeded, the only site with visible growth was at Nashua. However, there was not enough at any of the sites to collect fall biomass samples. The sites will be assessed in the spring for amount of biomass and soil sampling will be conducted for bulk density and soil nitrate, and lysimeter installation in each plot. The identification and recruitment of 10 farmer partners for the two-year on-farm mixes demonstration project will begin in spring of 2014.

## **Water Rocks!**

### **JANUARY-MARCH**

While much of our work was behind the scenes this quarter, we continue to make good headway in developing the content with the full campaign publicly launching later this year.

Video work was at the heart of our efforts this quarter. For the music videos, Isle of Plastic was completed and planning/production is underway for the Water Rocks! themed video. For the PSAs, multiple videos are in progress for each series: What's In Your Water?, Treasures of Iowa, and I Am An Iowan. The "Adventure of the Conservation Pack" series, including 10 initial episodes, made great strides this quarter and is nearing completion. Water Rocks! musicians focused their efforts on developing 13 background instrumental pieces for the PSAs and "Adventures of the Conservation Pack" videos, which will be recorded within the first week of April.

Our new "Wonderful World of Wetlands" educational module has been tested with homeschool students and is ready for public launch in April. This module includes several different interactive activities, including "Habitat Hopscotch" and "Wetlands BINGO," to help students better understand wetlands' roles in protecting water quality and habitat.

We look forward to starting up again with school visits and outreach events as the weather warms. There are currently over 20 youth outreach events—school visits/outdoor classrooms—scheduled for the spring months. We’re also excited about a new collaboration this summer, working with Iowa’s public libraries for their “Dig into Reading” summer reading program; over 20 public library visits are already on the calendar for June and July.

The Water Rocks! team is making a concerted effort to promote our in-classroom programs. These presentations can be carried out year-round, without the Conservation Station trailer, which we hope will help alleviate the busy spring season when numerous requests go unfulfilled. To promote in-classroom visits in particular, we have overhauled the “Catch the Wave” education and outreach pages on the Water Rocks! website and created an additional handout for teachers specifically outlining the in-classroom programs that we offer.

Several meetings were held to brainstorm and begin planning the official Water Rocks! launch and media blitz for September. Additional happenings this quarter included the hiring of three new summer undergraduate interns, submission of a USDA-NIFA Secondary Education Challenge grant, beginning work on a new biodiversity educational module and meeting with ISU genetics/cell biology professor Eve Wurtele to discuss STEM, the arts, gaming, and possible collaboration on a Water Rocks! summit/teacher training down the road.

## **APRIL-JUNE**

Water Rocks! highlights and happenings this quarter include:

- Rock Your Watershed! online game receives a national award from the American Society of Agricultural and Biological Engineers (ASABE). The game will be honored as a 2013 Educational Aids Blue Ribbon Award Winner at the ASABE International Meeting in Kansas City later in July.
- Despite the cool and wet spring, our team conducted 42 youth educational events this quarter including school visits (many of which were moved indoors for weather reasons), outdoor classrooms, and visits to public libraries across the state. Several new interactive activities have been added this quarter:
  - New module “Fabulous World of Wetlands” has been completed. This new module features a 45-minute lesson on the many functions and diverse habitat that wetlands provide. This module was presented several times during the April and May school visits. With the engaging new activities “Habitat Hopscotch” and “Wetland Bingo,” students said they felt like they were on a real game show.
  - “Great Poo Pickup Relay” – Highly competitive relay race to pick up (fake) dog waste!
  - “Dig Into Soil” educational module with accompanying interactive activities: (1) soil recipe station where students get to add soil ‘ingredients’ to a magical cauldron, (2) rainfall simulator, where students learn how to protect our soil and keep it healthy,

and (3) edible soil cups!

- First 10 episodes in the “Adventures of the Conservation Pack” series are posted online.
- Water Rocks! team spent a full week in June filming music videos with the full band as well as high school students, and look forward to seeing the finished products as the year continues.
- Geocaching: 11 State Parks/locations have been selected as hosts for the statewide Water Rocks! geocaching campaign. Parks/locations include Spirit Lake, Pilot Knob, George Wyth, Pikes Peak, Black Hawk, Lewis and Clark, Big Creek, Palisades-Kepler, Viking Lake, Honey Creek and Geode State Park. Five parks have been scouted with GPS coordinates collected thus far. Black Hawk State Park has already approved the cache locations within the park. Original Water Rocks! wooden nickels have been developed and printed to help promote/market the program as well as to direct traffic to the Water Rocks! website. Youth “pirate maps” have also been designed to be placed in the caches for each different state park.

Additional happenings this quarter:

- Planning for official Water Rocks! launch and media blitz for September
- Investigation and development of social media platforms for Water Rocks! (Facebook, Twitter, and Instagram)
- Training of five undergraduate student interns
- Ongoing development of our new stormwater and biodiversity educational modules
- Development of a new full-color brochure promoting Water Rocks!
- Distribution of DVDs and educational materials to academic/public libraries statewide
- Planning for Water Rocks! Summit (teacher training event) in summer 2014

## **JULY-SEPTEMBER**

Water Rocks! makes a big splash... after months of preparation, our new youth water education program officially launched in September! Water Rocks! is being publicly promoted through a wide variety of means, including TV and radio advertisements, press releases and articles, conference presentations, social media, and sharing via word-of-mouth, all helping to generate much excitement and positive attention for this campaign.

Water Rocks!’ video campaigns made great strides this quarter, with a total of 33 videos now posted online. Collectively, these videos were viewed a total of 17,140 times this quarter. Most of these videos were posted at the very end of August, so the large majority of these views came during the month of September alone!

Another exciting new feature of Water Rocks! is the establishment of a statewide geocaching network, combining outdoor exploration, learning, and GPS technology. Water Rocks! caches have been placed in seven state parks including Elinor Bedell, George Wyth, Black Hawk, Big Creek, Palisades-Kepler, Viking Lake and Red Haw, and they are receiving many positive comments from the geocaching community.

Direct youth outreach continues to be at the heart of Water Rocks!, with the team conducting 33 youth educational events this quarter including public library visits, school visits, and youth outdoor classrooms. We are continuing to develop new classroom modules and hands-on activities, and planning is also underway for the initial Water Rocks! teacher summit to be held in June 2014 on campus at Iowa State University.

### **OCTOBER-DECEMBER**

Water Rocks! has continued to garner much attention this quarter, from students at classroom visits and STEM festivals, to teachers at the Iowa Academy of Science-Iowa Science Teaching Section's fall conference, through WR! e-news (circulation of 3,038), and through TV and radio broadcasts. Water Rocks! was featured in print and online publications including *Wallaces Farmer*, *Iowa Current Developments* (NRCS newsletter), Practical Farmers of Iowa newsletter/blog, and the Iowa Learning Farms blog. Combined with Water Rocks!' own social media outlets, the media and print advertising helped to generate significant traffic to the website (and Rock Your Watershed! game), with page views and plays this quarter exceeding all other quarters combined.

New videos posted this quarter include seven videos in the Treasures of Iowa series and one music video titled "Cover Crop Anthem." While not yet posted online, we have also worked closely with our videographers to complete nine additional videos in the "What's In Your Water?" series and one more pharmaceutical ad for the "I Am An Iowan" series. We also have a 25-minute video in progress titled "Incredible Wetlands" to help youth audiences better understand the importance of wetlands on the landscape, how they function, the biological diversity they house, and their role in protecting water quality here in Iowa.

Planning is underway for the inaugural Water Rocks! Summit, a professional development workshop to be offered June 11-12, 2014, that offers training for K-12 classroom teachers on a multitude of hands-on, interactive educational modules to help teach classroom lessons on water, soil, agriculture, environmental science, and more. Attendees will also have the opportunity to further their technical understanding of agricultural and environmental issues related to these topics through talks by several Iowa State University faculty and staff working in these fields.

Water Rocks! geocaches have now been placed in nine different state parks across Iowa, with three or four individual caches per park. Feedback has been highly positive and we look forward to expanding this component of Water Rocks! in 2014.

## **Watershed-based Community Assessment Project**

### **JANUARY-MARCH**

The Hickory Grove Lake Watershed Management Plan was finalized this quarter and submitted it to IDNR. It was approved in mid-March. We are completing the Watershed-based Community Assessment project this quarter by conducting several interviews with key watershed stakeholders in Black Hawk Lake watershed. In addition, Comito has been consulting with Tom Kasper on the sociological issues concerning cover crop adoption in Iowa.

### **APRIL-JUNE**

The Black Hawk Lake Watershed Citizen Assessment and Outreach Campaign document was completed during this quarter and sent to the watershed coordinators and the DNR in early July. The document is comprehensive and contains a detailed assessment of the watershed community, many ideas for awareness and pride-building activities as well as suggestions for marketing the lake to audiences.

### **JULY-SEPTEMBER**

We completed the community assessment of *Black Hawk Lake watershed* and had it approved by the local stakeholder group. The watershed improvement group did not want to meet with us but instead were going to go forward with incorporation of our recommendations. The assessment is available to the public on our website. We reviewed the Watershed-Based Community Assessment Toolkit but felt that no revisions were necessary. We do know that projects such as Indian Creek are using the Toolkit as a basis for their own watershed community assessment. We have been asked to submit a bid to conduct their assessment. Wolseth and Comito are working on a journal article based on the community assessment work. We finished a first draft during this quarter. Four geocaches have been placed in Black Hawk State Park. Within the caches is an illustration of the park (cache map), Water Rocks! and DNR wooden nickels, a notebook for the participants to sign and a scan-able “qrcode” in each cache that allows users to view the clues and illustrations on their smart phones or other digital device.

### **OCTOBER-DECEMBER**

Comito and Jon Wolseth completed the Watershed-based Community Assessment project for the IDNR and spent the quarter working on a journal article using the Black Hawk Lake watershed database. They will submit the article for publication in early 2014.

## **Accelerating Strip-tillage Adoption Project**

### **JANUARY-MARCH**

Copies of the strip-till DVD were available at all spring 2013 ILF field days.

A Strip-Till Coalition of Iowa meeting was held in late February at the John Deere Works production facility in Ankeny. Farmer partner Robert Lynch and John Deere representative Jay Mohr contacted ILF about coordinating an information exchange with a group of 19 Ukrainian farmers who were visiting John Deere facilities in the United States. The two groups received a tour of the John Deere Works facility, and then Andrews, Lynch, Dave Nelson and Mark Thompson gave strip-till presentations. The Coalition then met to reconnect and discuss future outreach activities. Those present included: Matt Helmers, Aaron Andrews, Matt Lechtenberg, Jim Gillespie, Robert Lynch, Mark Thompson, Jon Giselson, Arlo Van Diest, Dave Nelson, Fred Abels, and Steve Stamper. The group discussed field day strategies and plans for the inaugural midwestern strip-till conference to take place in late January or early February 2014. A conference planning committee will be formed and meet in the second quarter 2013.

### **APRIL-JUNE**

Copies of the strip-till management how-to DVD were available at all spring 2013 ILF field days and the Iowa Ag Educator Conference in June. Copies of this DVD, as well as all how-to videos, were mailed to 114 public libraries in Iowa this quarter, for them to make available to their patrons.

Plans for an inaugural Midwestern Strip-Till Conference for late January or early February 2014 continue. A conference planning committee has been selected and will meet in the third quarter. This quarter, Andrews began looking into conference facility options and costs. He will investigate the potential for corporate sponsorships after the planning committee meets.