

# CONSERVATION CATCHA

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Jake Vancil



Samantha Scaccianoce, a 10th grade student at Genoa-Kingston High School in DeKalb County, received an Honorable Mention at the NACD Annual Meeting in San Antonio, TX. Samantha was not able to be present to collect her award, but joins a growing list of Illinois' artists who have submitted winning posters to be judged at the annual NACD event. Samantha's poster illustrated the 2012 Soil to Spoon poster contest theme very well.

The contest provides an opportunity for Kindergarten through grade twelve students to convey their thoughts about soil, water and related natural resource issues through artwork. It also highlights the educational outreach efforts of the DeKalb County SWCD.

The poster contest is part of National Association of Conservation Districts Stewardship Week, the longest running celebration of conservation in the country. NACD and the NACD Auxiliary co-sponsor the event.

The theme, Soil to Spoon gave students the opportunity to think about the food they eat Samantha's poster was the first place in daily. Each day they enjoy a variety of foods 2012 AISWCD Poster Contest in the Grade but may not make the connection to where it 10-12 category. came from. The project helped them under-

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stand that each item they eat can be traced back to the soil. Without healthy soil, we would not have healthy food. Students will have a better understanding and appreciation for food, and the process to get it to their plate. It takes people in a variety of jobs to produce and deliver the food. The new food guidelines (ChooseMyplate.gov) were also addressed to understand what a healthy meal consists of.

Samantha joins 2011 10-12 grade poster contest winner Patrick Price also of Genoa-Kingston High School. Patrick also won honorable mention at the NACD Annual Meeting in 2012.

The 2013 poster contest theme is "Where Does Your Water Shed?"



for your information.

## **Escalating Cost of Forest** Conservation

In the face of unprecedented deforestation and biodiversity loss, policy makers are increasingly using financial incentives to encourage conservation. However, a research team led by the National University of Singapore matter of years, demand more for their conservation ac-(NUS) revealed that in the long run, conservation incen- tions. Small-scale farmers might also be displaced by tives may struggle to compete with future agricultural larger commercial ventures as farming becomes more yields.

Their findings were first published online in the Proceedings of the National Academy of Sciences on 15 April After taking these factors into account, the researchers 2013.

#### Financial incentives for conservation

Incentives are being leveraged in dozens of tropical de- conservation. veloping countries to conserve forests, to protect biodiversity and reduce carbon emissions from deforestation. Escalating cost is top concern This incentive-based approach is comparatively inexpensive, as low agricultural yields and widespread poverty often mean that relatively small incentives can motivate improving the livelihoods of poor communities around many landholders to protect their land for conservation.

As a result, this approach has become a leading climate change mitigation strategy adopted by the United Nations as policies for Reducing Emissions from Deforesta- have to dramatically increase to compete with future agtion and Degradation.

#### Costs of conservation in the long run

conservation programs, the team, comprising research- and first author of the study, "Our research suggests that ers from NUS, ETH Zurich and University of Cambridge, as agriculture becomes more intensive, the small paydeveloped a framework and model that looked at the ments successful at incentivizing forest conservation strategy's effectiveness in the context of intensified farm- today could increase to well beyond what is considered ing practices.

The researchers modeled conservation payments necessary to protect forests in the Democratic Republic of Congo (DRC), which has some of the largest remaining The question is; will we as conservationists sacrifice our forests in the world. They found that a new agricultural forested land for the sake of a few more acres of corn or intensification and conservation program could double or beans? triple cassava and maize yields by introducing diseaseresistant plant varieties, increasing fertilizer use and improving farming practices.

Increased farm yields will bring dramatic benefits to DRC farmers, and could increase land area spared for conser- tion." ScienceDaily, 16 Apr. 2013.

President Wilson has asked that we use the following vation. Similar agricultural intensification policies are being promoted across the tropics.

> However, the researchers highlight how those higher vields and incomes will also increase financial incentives for farmers to clear more forest for agriculture. As a result, financial incentives to encourage farmers to protect forests and not expand agriculture would need to escalate as well. They expect farmers who were once willing to protect forests for a comparative pittance could, in a lucrative, and as profits increase with growing global demand for agricultural products.

found that while the current costs of forest conservation in many countries are very low, future changes in agricultural practices could radically increase the cost of

The NUS-led study illustrated that these contemporary policies tend to focus on short-term conservation and on forested areas. However, they risk overlooking impacts of on long-term conservation.

The researchers warn that conservation expenditure will riculture.

Said Jacob Phelps, a PhD candidate in the Department In a bid to assess the future viability of these types of of Biological Sciences at the NUS Faculty of Science economically efficient, or even feasible. We anticipate that similar patterns are likely across the tropics, including in places like Indonesia."

Aun Ehl

Source: National University of Singapore. "Escalating cost of forest conserva-



## EXECUTIVE DIRECTOR'S NOTES - RICH NICHOLS

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us and we can begin to enjoy the onset of warmer ber, we will be calling on the SWCDs to contact legweather, flowers, leaves on trees, gardening, yard islators to make their opinions known. work, planting and just being outdoors more. It appears, at least for now, that last year's drought is an When we meet with legislators, I am encouraged by unpleasant memory and a different weather pattern their reactions when we mention soil and water conhas set in.

southern tier of counties, that the drought is still what do I have to do with them?" We still get guizzicausing some problems. Pastures and forage crops cal looks on occasion but more and more legislators were damaged to the point of no return and produc- are paying attention because someone had taken ers who depend on those feed stocks for their live- the time to call or write them and explain what the stock are scrambling to reseed and reestablish SWCDs are, what they do and how the programs those severely damaged areas. By the same token, they administer benefit the legislator's constituents. many waterways, buffers and filter strips are also in I compliment those of you who are responsible for need of extensive repair. I hope that the govern- making that effort. It certainly makes our job easier. ment agencies that were so concerned about the We seldom get more than five or ten minutes to predry conditions and problems last summer are still sent our case and if we have to use half of those concerned enough about recovery that they don't precious minutes explaining what SWCDs are, what ignore the ongoing problems.

certainly help with recovery efforts.

After a brief respite while the General Assembly was I hope most of you who are reading this article also on their spring break, they are back in town and go- get and read my weekly reports. I have been including full bore to try to finish this year's legislative ing updates and current status for legislation that the agenda before May 31<sup>st</sup>. The big items that they are AISWCD is tracking. Not all of the bills listed in my dealing with are pension reform, right to carry, and weekly summary are bills that we are actively workof course, the state's backlog of bills and unfunded ing with but instead are included because the subpensions. There are a number of other items that ject matter may be of interest to the SWCDs and to they will be dealing with in the coming six weeks but the people you serve. You are welcome to use that few are as contentious as the three just mentioned. information to help keep your landowners informed I have no doubt we will be meeting with legislators in and to let them know what is being considered that the next few weeks to try to get HB0987 passed, may impact them in some way. assure that the additional \$515,000 for SWCD operations remains in the budget, get SWCD included in There are a number of bills that have been sent legislation authorizing fracking as a funded entity to back to the Rules Committee in the House or the provide assistance to regulators and oil companies, Assignments Committee in the Senate. work on a funding bill for SWCDs, and hopefully those bills will die but as that great philosopher Yogi stave off any legislation that would adversely affect Berra once said, "it ain't over 'til it's over". SWCDs and the people they serve.

As time passes and we get closer to the deadline for bills to pass out of their respective chambers and

It's April! With any luck, the cold weather is behind deadlines for bills to be passed in the second cham-

servation districts. In 2005 when I started this job, we would often get a blank look and the question I know that for many of you, especially those in the "What is a soil and (water) conservation district and they do, etc. we really don't have time to make a good case for our cause. Your efforts do make a At least it seems that the current weather pattern will difference and those efforts help us help you. Thanks!

Most of

Rich



# PROGRAM COORDINATOR'S PAGE - KELLY THOMPSON

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Spring has arrived! Now all we need are the warming temperatures to make it official.

So, along with spring and warm temperatures comes preparation for the Summer Conference. I have some exciting news for those who plan to attend CPESC training this year at Summer Conference. The CPESC planning team decided to have a tour on Monday morning, July 22nd. The tour will feature a local construction project in the Springfield area and if time allows, the tour will visit the Association office to view permeable pavement.

The planning team has also secured several informative presentations for the afternoon session. We look forward to you attending CPESC training this year at Summer Conference!

Secondly, at the AISWCD quarterly board meeting, held on March 12, Gerard Fabrizius, Land Use Council 16 representative, brought to the meeting a Best Management Practices (BMPs) display that he had made. The display features BMPs such as permeable pavement, a rain garden, stream bank restoration features and much more. The display will be featured at the Illinois Urban Manual booth during Summer Conference. Make sure you stop by the booth for a chance to win a door prize for naming all the BMPs featured on the display.

I'd like to share with everyone a few photos I took of the display.



You can also find a video of the display on YouTube: <u>http://www.youtube.com/watch?v=sM\_ea4F\_g8o</u>. A big thank you to Gerard Fabrizius for allowing AISWCD to utilize this display! Great Job!

Wishing everyone a safe and happy April!

Kelly Thompson



## ADMINISTRATIVE ASSISTANT'S UPDATE - SHERRY FINN

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#### **March Activities**

**Annual Meeting Update:** 

ence is coming along guite nicely. Room reservations we'll see the rock chute, waterways, fall construction of for the Annual Meeting can be made with the Northfield a waterway and impacts of rural urbanization; the Inn, Suites and Conference Center by phoning: (866) Stockdale Safe Acres, the tile water management and 577-7900 from 4/15/13 through 6/30/13 and rates are saturated buffer research site. We will then travel back \$70. The following link will attach you to the AISWCD to Springfield where we will see a large CREP area. webpage with all the forms: http://aiswcd.org/ filter strips, an animal confinement system, aluminum EventsAndNews/Annual%20Meeting.html.

contest is one. You may check out the form and give Farm Bureau for supper. This tour is being arranged the office a call or send an e-mail if you have any questions. These are being used for table decorations at the Recognition Luncheon and the Farm Family Banquet and will be sold to anyone that wants to purchase them except the winning terrariums. They will be auctioned off at the AISWCD Live Auction on Monday night.

Springfield Another is Lake Watershed а (Conservation) Resource Tour on Sunday, July 21, 2013 at 1:30 p.m. This tour will include the 6<sup>th</sup> Street

Wal-Mart - the first Wal-Mart to be planned with stormwater retention in mind; the Nipper Wildlife Sanctuary The 65<sup>th</sup> AISWCD Annual Meeting/Summer Confer- an education site in Thayer, IL; on the way to Thayer, toe-wall structure, CWLP funded pond, and stream bank stabilization; a stop will be made at the Southwind We are adding several new things this year-a terrarium Park facility; and finally, we'll arrive at the Sangamon with the cooperation of the Sangamon County SWCD.

> We are also including a fun and adventure activity on Sunday evening at the Boulder Creek Fun Park next door to the Northfield Inn. Further information on this event will be included next month in the Catchall.

> Make plans now to take advantage of this great opportunity to see and learn more about conservation activities!



## The 15th Annual Illinois Leadership Conference June 6, 2013



#### Who should attend?

This conference is designed for anyone in a leadership position in a community or organization, serving on a board of directors, working on community projects or with committees, and seeking to manage and lead more effectively.

#### What is the cost?

Cost of the conference is \$75, and includes refreshment breaks, lunch, and all materials. Scholarships and CEUs are available. Participation is limited, so register early. For more information, contact Anne Heinze Silvis, University of Illinois Extension, at asilvis@illinois.edu.

#### 2013 Keynote

Principles for Leading Across Generations



Happy April Everyone!

Spring is here and what better way to celebrate then to hike/walk across the country!!! Not your cup of tea? Well a gentleman from Georgia named Josh Seehorn is doing just that and its to raise money for Envirothon. Josh grew up with Envirothon competing at the Regional, State, and North American levels. He is the Vice-Chair of the Georgia Envirothon and will also be the Coordinator for the 2014 North American Envirothon which will be held in Georgia.

Josh's journey began on March 21<sup>st</sup> on the west coast. He will be taking the American Discovery Trail across the country. His websites, <u>www.joshseehorn.com</u> and <u>www.outdoorjosh.com</u>, give you more background information on him and what he is doing. You can also read about his travels so far. We are not sure when, but when I emailed with him a couple of weeks ago, he was planning on taking the northern part of the trail through Illinois.

I feel it is important for us to support him in any way that we can. So, what can you do to help him? Pass his information along, follow him on Facebook (Josh Seehorn) and Twitter (@theoutdoorjosh), and reach out to your schools. If you look at the picture below, and Josh is coming close to your District, I'm sure he would love help getting in contact with some of the schools that he could go talk to.

On his sites, you can find all of his contact information. There is also a Press Release and Donation section.



Thank you in advance for whatever help you can give Josh and his efforts in helping Envirothon!

# Gina Bean



Greetings! As you all know, Legislative Day was held March 6<sup>th</sup>. A big "THANK YOU" goes out to the AISWCD for their preparation prior to the event and to the SWCDEA Legislative Committee, Abbie Sperry and Melissa Cauble who did a great job of pulling everything together to make the day a huge success. A special "THANK YOU" goes out to the 45-50 directors and employees who took the time to attend. Your efforts were truly appreciated. Already, there has been positive feedback regarding the day and plans are underway for next year, so plan to attend!

Recently, all offices received information from Sherry Finn regarding 2013 Annual Meeting Award Applications. If you are thinking about entering the name of someone for an award please send the entry to your local Land Use Council Chairman by April 22<sup>nd</sup>. I am hoping that there will be a large number of <u>Outstanding District Employee</u> applications submitted. We have so many great SWCD employees throughout the state who have "gone above and beyond the call of duty" and this is one way for them to be recognized for their hard work and loyalty not only to their respective districts but also how their efforts have touched the working environment in all District offices. So please, send in those applications.

By now you should have received the Employee Scholarship, sponsored by the ISWCDEA. Applications are due to Joe Bybee by June 30<sup>th</sup>. I realize this is a very early reminder but it is best to make sure you mark your calendar so you won't forget the deadline.

Until next time!



# ILLINOIS CHAPTER - IAAP - SHARON MATSON, PRESIDENT

website: http://iaap-swcd.tripod.com

Our annual meeting will be held Wednesday, April 24, 2013 and we invite all to attend. This will be held at the Department of Ag Building in Springfield, Illinois, Room 66 at 10:00 a.m. We will hold the election and installation of officers, lunch will be provided.

Our speaker for the session will be Marie Herman, CAP-OM, ACS 2012-2013 Illinois Division President will give the program "Becoming the Renaissance Admin"

If you are interested in joining the IAAP (International Association of Administrative Professionals) please contact any member of the organization or go to our website http://iaap-swcd.tripod.com and view what is happening.

## UNDERSTANDING THE CONTINUOUS CORN YIELD PENALTY

(Continued from page 9)

sons, increased N rates can overcome the CCYP. Unfortunately, higher N rates do not eliminate the CCYP during average or poor growing seasons. This study concluded that the primary causes of the CCYP are: N availability, corn stover accumulation, and unfavorable weather.

"Given that weather cannot be controlled, and the optimum N fertilizer rate can be determined only after crop harvest, managing corn stover has the greatest potential for reducing the CCYP," said Gentry. The same research team is collaborating on a follow-up study investigating the effect of stover removal and tillage on the CCYP.

The above story is reprinted from materials provided by University of Illinois College of Agricultural, Consumer and Environmental Sciences. The original article was written by Laura Gentry.





## Legislative Corner - Mike Hoffmann

#### Governor Proposes Increase for SWCDs for FY 2014

The Governor unveiled his budget recommendations for fiscal year 2014 (which starts on July 1, 2013 and ends on June 30, 2014) on March 6 – and it presented some welcome news for SWCDs. As you are probably aware, both the grant lines for soil and water conservation and the cost-share program are now funded from the Partners for Conservation Fund. This was done in the current year's budget passed last spring.

For fiscal year 2014, the Governor proposes funding SWCD grants at \$3 million – up from \$2,485,000 for the current year. Cost-share funds, some of which have been used to fund employees' health insurance and supplement operational expenses would remain level at \$4.5 million. Overall this represents an increase of \$515,000 or 7%. Of course this is not the end of the process; the Governor's budget is now being reviewed by the Appropriations Committees in the House and Senate. Ultimately, a budget will be passed by the General Assembly. So, we have our work cut out to preserve our budget through the legislative process.

As the General Assembly is now on a two-break from Springfield for the spring holidays, legislators will be spending more time in their districts. So this would be a good time to talk to your legislators in their districts about funding for SWCDs. A new state budget must be passed by the end of May, and state legislators will be in Springfield most of April and May.

#### Gaming Legislation

This year's gaming proposal in included in <u>SB1739</u>. Unlike the last two versions of the bill, both of which passed the General Assembly and were vetoed by the Governor, this bill does not at this time contain funding for the downstate budget initiatives. This may change as downstate legislators are making it known that they prefer those funds to be allocated as they were in the past. We will be following this closely as it moves through the General Assembly. We are pursuing this and other possibilities for finding new sources of funding for SWCDs.

#### Downstate Budget Initiatives in SB 1849 (House Amendment #2, November 7, 2011)

Transfer to the Partners for Conservation Fund for Soil and Water	
Conservation Program	\$ 12.5 m
State Fairgrounds Infrastructure Improvement Fund	\$ 10.0 m
County Fairs funding	\$6.0 m
Cooperative Extension: match 100% of local funds	\$5.0 m
Future of Agriculture Fund (for county fairs, FFA, extension)	\$5.0 m
Transfers to Parks and Conservation Fund for operations and grants	\$ 3.0 m
IL Historical Sites Fund	\$ 3.0 m
IL Forestry Fund	<u>\$ 1.5 m</u>
Total	\$ 46.0 m

#### REMEMBER: KEEP YOUR STATE LEGISLATORS EDUCATED ON SWCD ACTIVITIES

# UNDERSTANDING THE CONTINUOUS CORN YIELD PENALTY

As escalating corn prices have encouraged many farmers to switch to growing corn continuously, they wonder why they have been seeing unusually high yield reductions over the past several years. The University of Illinois conducted a six-year study that identified three key factors affecting yield in continuous corn (CC) systems.

"Prior to this study, the most common management recommendations for continuous corn production were to apply an additional 45 pounds of nitrogen per acre and reserve your best crop land for it," said U of I soil scientist and lead author Laura Gentry. "Very little was known about the agents or mechanisms causing reduced yields in continuous corn systems."

Although corn can be cropped continuously, it is widely accepted that there is a yield reduction compared to corn rotated with soybean (CS). This difference is referred to as the continuous corn yield penalty (CCYP), which is generally in the range of 20 to 30 bushels per acre. The 2012 growing season marked the third consecutive year of unusually high CCYP values in the U.S. Midwest, often with corn yields that were 30 to 50 bushels per acre less than corn following soybean.

The researchers conducted the experiment from 2005 to 2010 in east-central Illinois, beginning with corn produced in a third-year CC system or a CS rotation, at six N fertilizer rates. The study investigated: 1) how the yield penalty changed with time in CC, 2) under what conditions increasing the nitrogen (N) fertilizer rate reduced the penalty, and 3) what causes the penalty?

Each year, they determined an "agronomically optimum N rate" and corresponding yield value for each rotation (CC and CS). On average, corn yield at the agronomically optimum N rate for CC was 167 bushels, compared to 192 bushels per acre for CS -- a CCYP of 25 bushels per acre. CCYP values ranged yearly from 9 to 42 bushels per acre.

Matias Ruffo, a co-author of the paper and Worldwide Agronomy Manager at The Mosaic Co., said, "To explore the causes of the CCYP, we tested a number of different weather- and yield-related measurements for their relationships with the CCYP. We found that with just three predictors, we could estimate the CCYP with almost 100 percent accuracy." The predictors were: 1) unfertilized CC yield, 2) years in CC, and 3) the difference between CC and CS delta yields.

The researchers found that the best predictor of the CCYP was unfertilized CC yield. In years when unfertilized CC yields were relatively high, the yield penalty was low, and vice versa. Unfertilized CC yield is an indicator of how much N the soil is supplying to the corn crop, either from residual fertilizer N or from decomposition of previous crop residues and other organic matter (N mineralization).

The second predictor of the CCYP, years in CC, was also strongly correlated with the CCYP. CCYP got worse with each additional year in the CC system through the seventh year, when the study was terminated.

This conclusion is at odds with the claims of many Corn Belt farmers who argue that corn yields in CC eventually attain the same level as CS rotations. On average, the CCYP in this study increased by 186 percent from third-year CC to fifth-year CC and 268 percent from third-year CC to seventh-year CC.

"Yield reductions resulting from additional years of continuous corn production mirror the effects of residue accumulation when corn is cropped continuously," said U of I crop physiologist Fred Below, another co-author. "It is well documented that corn residues introduce a host of physical, chemical, and biological effects that negatively influence corn yields."

Effects of accumulated corn residues include reduced soil temperature, increased soil moisture, reduced N fertilizer availability, and production of autotoxic chemicals, all of which can negatively affect growth and future corn crop development.

The final predictor of the CCYP, difference in CC and CS delta yields (the difference between the yield where no N was applied and the maximum yield under non-N limiting conditions), is probably a function of weather conditions, particularly during critical growth periods such as ovule determination and grain fill. Drought and heat can disproportionately reduce yields of the CC system relative to the CS system. This principle was demonstrated during the 2012 drought, when farmers reported yield reductions as large as 50 bushels per acre for CC systems compared to CS.

Based on this study, the authors concluded that the CCYP persists for at least seven years. However, during very favorable growing sea-



MARK YOUR CALENDAR!

- Earth Day April 22nd
- Administrative Professionals Day April 24th
- Bird and Arbor Day April 26th

2013 QUARTERLY BOARD MEETING DATES

- June 2013 Quarterly Board Meeting June 10th & 11th Northfield Inn Springfield, IL
- September 2013 Quarterly Board Meeting September 10th Teleconference (Only if Needed)
- December 2013 Quarterly Board Meeting December 9th & 10th Northfield Inn Springfield, IL

Even though Spring always occurs in March, April is the month when the trees bring forth their leaves, flowers bloom, the lawns green up and things generally feel more like one would expect spring to feel. Numerous noteworthy events have occurred during the month of April and there are lots of days in April that are celebrated here and across the world that relate to spring and the new growth that April brings forth.

Some month long observances for April include: Autism Awareness Month Keep America Beautiful Month National Frog Month National Volunteer Month, and Stress Awareness Month, among others.

Special days that we celebrate and important events that occurred during April include: April Fools Day - April 1st International Children's Book Day - April 2nd First home phone installed - April 4, 1877 NATO established - April 4, 1949 North Pole discovered - April 7, 1898 First public library opened in Peterborough, NH - April 9, 1833 National Sibling Day - April 10th US acquires its first submarine - April 11, 1900 Space Shuttle Columbia first launched - April 12, 1981 Thomas Jefferson's Birthday - April 13, 1743 First McDonalds opened in Des Plaines, IL - April 15, 1955 Income Tax Day - April 15th (Well I suppose tax preparers may consider it a day of celebration.) National Eggs Benedict Day - April 16th Great San Francisco Earthquake - April 18, 1906 Earth Day - April 22nd Hank Aaron hit his first home run - April 23rd, 1954 Take our Daughters to Work Day - April 24th Hug a Friend Day - April 26th Gideon Sindback invented the modern zipper April 29, 1917 National Honesty Day - April 30th

## AISWCD Mission: To represent and empower Illinois' SWCDs

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