



Mission Statement
The Iowa Learning Farms promote efficient agriculture production systems that result in agronomic, economic, and environmental improvements through increased awareness and adoption of conservation systems and ethics.

Volume 7 Issue 3 Fall 2011

New video 'Out to the Lakes' available

Is there a water quality problem in Iowa?

This question is posed to Iowans in the latest video produced by Iowa Learning Farms. "Out to the Lakes" is a provocative and engaging film that encourages viewers to think about water quality and their personal relationship with their local lake or water body.

The film addresses water quality through the perspective of lakes and the water bodies that feed them. The case study used in the film is Black Hawk Lake in west central Iowa. Black Hawk Lake is used mainly for recreational activities including swimming, boating and fishing. On screen, several local residents share their experiences and concern for the lake that has brought them so much personal joy.

Even though the film focuses on the happenings at a particular lake, the same sentiments can be applied to many lakes in Iowa and the Midwest. Like Black Hawk, lakes throughout the Midwest have been periodically closed due to high bacteria or algae levels. Some lakes are filling up with sediment coming off of nearby fields at rates higher than what should be naturally occurring.

Often, when asked about water quality, people think only of their drinking water. This is just one aspect of water quality. Because drinking water usually comes out of the tap in a good quality, it is generally taken for granted. Our connectedness to water has been lost. The challenge to the viewer of the film is to recognize water quality problems and to reconnect with their lake in order to help improve water quality.

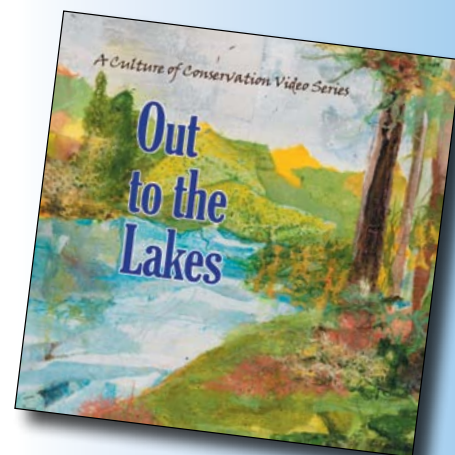
Locally and professionally created

ILF program manager Jacqueline Comito directed "Out to the Lakes." She spent a lot of time on Black Hawk Lake throughout her life and was inspired by the lake to make this final video in the series "A Culture of Conservation."

"This is the most ambitious film project we have done," says Comito. "I heard someone say that this film is 'edgy.' We heard quite a bit of laughter during the premiere, which is great, because humor is a powerful tool. But after it is over, we are left with a somber portrait of the state of our environment in Iowa. Until we understand what is happening in terms of our water quality, soil quality and climate variations, our lakes and water systems will continue to degrade."

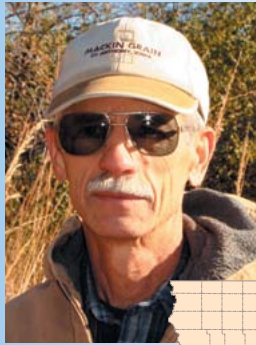
ILF staff member Ann Staudt served as music and art director and Des Moines resident Jon Anderson produced the film. All the music is original, composed by Staudt and Todd Stevens and performed by Ames group Joyful Hearts. The film uses watercolors created by Iowa State University student Jessica Willemsen.

...LAKES continued on page 3

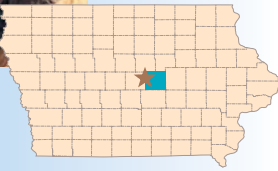


Email Iowa Learning Farms (ilf@iastate.edu) to request a free DVD of "Out to the Lakes."





Carl Kurtz



Partner Profile

Carl Kurtz lives “on the edge of the lobe” on the farm his father purchased in 1930, in western Marshall County. The land is rolling, carved by outwash as the last glacier receded.

During the mid 1900’s, the Kurtz farm was a typical mixed farm with row crops, some livestock and a large garden. Over time, Carl and his wife Linda have converted 167 of 250 acres from row crops and pasture land to perennial prairie. They now manage for diversity, harvesting from their native species prairie in the fall and selling the mixed eco-type seed to a variety of customers. They also cash rent 83 acres in row crops.

Minerva Creek runs through the property and eventually flows into the Iowa River. The perennial grasses virtually eliminate run-off and facilitate infiltration. Four wetlands treat the tile water from surrounding crop land.

Kurtz has a degree in Fish and Wildlife Biology from Iowa State University, and he pays attention to how his land management affects the birds and mammals on his farm. “Living here, surrounded by prairie, with the wildlife coming through, enhances our lives so much,” says Kurtz.

His interest in wildlife and the land also provides a base for his career in photography. He currently provides the *Ames Tribune* with a weekly nature photograph, delighting its readers with a glimpse of the seasons. He is the author of two popular books, “A Practical Guide to Prairie Reconstruc-

...PROFILE continued on page 3

Newly published book offers insight into water quality perceptions

By Jacqueline Comito and Jon Wolseth

Perhaps one of the greatest environmental challenges Iowans face in the coming decades is that of maintaining clean sources of water for our livelihood and recreation. Water quality is an issue that cuts across the rural-urban divide in Iowa and the Midwest. Farmers must protect their fields from soil erosion and manage nutrients. Rural communities must contend with shrinking economic resources to provide clean water and adequate sewage treatment as facilities age and deteriorate. Urban areas must realize that non-permeable surfaces lead to high rates of run-off that send yard fertilizers and other industrial chemicals into waterways. Iowa’s clean water is everyone’s responsibility because watersheds know no personal or political boundaries.

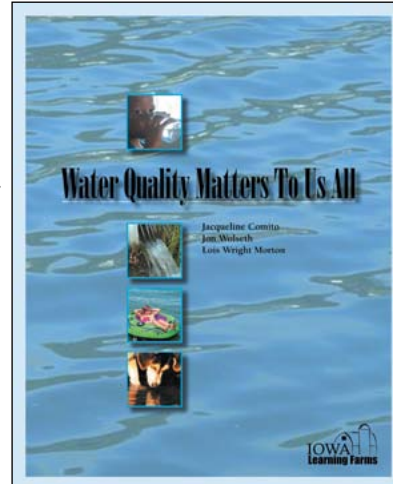
Iowa Learning Farms is pleased to announce the publication of *Water Quality Matters To Us All*, a new book that provides insight into the attitudes and practices of agencies and stakeholders involved in protecting Iowa’s water quality. Based on listening sessions over a three year period (2008-2011) with farmers, urban residents, Soil and Water Conservation District commissioners, and field staff from the Natural Resources Conservation Service and the Iowa Department of Natural Resources, the book details the institutional, community, and individual impediments towards water conservation and curtailing nonpoint source pollution.

The book pulls no punches in examining how attitudes and beliefs about the reliability of scientific evidence, personal responsibility, land ownership, and government intervention can prevent cooperation between the agencies charged with protecting natural resources from pollution and individual polluters. By relying heavily on interview excerpts, the book chronicles the conflicts in the state that are preventing concerted action in protecting our water quality.

Water Quality Matters To Us All diagnoses the current level of apathy toward improving water quality by situating debates about conservation practices within the context of historically high corn prices, increased flooding and dramatic rain events, and decreased soil quality. For instance, in hope of making increased profits from high grain prices, many acres of reserve ground are now being farmed, close to creeks, along with ditches and between fence posts. Likewise, city populations are rising, pulling land out of production for residences, businesses and parking lots and increasing urban run-off. As a result, rivers in Iowa and downstream contain sediment and chemicals that are harmful to animals and humans.

The book concludes that pointing fingers isn’t a solution, but that there are real attitudinal and institutional impediments to assuring water quality in the state. For this reason, educating policy makers, agency staff, and private citizens – both rural and urban – is key. In order to improve environmental literacy, ILF believes a state-wide effort should be launched to inform people about water quality issues, motivate them to get involved and ultimately to change their behavior toward water and water usage. It is only when we clearly see how our own practices impact the watershed we live in, will we start to take responsibility for ourselves and change our attitudes. Ultimately, water quality matters to us all.

If you would like a free copy of *Water Quality Matters To Us All*, email: ilf@iastate.edu with your request; please include a mailing address.



Value of soil erosion to the landowner

By Michael Duffy

Soil erosion levels have decreased in the United States and Iowa, but soil erosion remains a serious problem. In 1982, there was an estimated average of 7.4 tons per acre of soil erosion on Iowa cropland. By 2007, erosion in Iowa had decreased to an average of 5.2 tons per acre.

Erosion represents costs to the farmers including lost fertilizer and soil carbon. Erosion also produces costs to society. These costs include clogged roadway ditches, increased turbidity in the water damaging fish and increasing the need for filtration, and the displaced soil in the water increases siltation of water control structures. These societal costs are borne by taxpayers or society in general. They are “external” to the decisions made by the farmer.

Estimating the cost of soil erosion is extremely difficult and subject to a variety of assumptions. It is especially difficult to estimate the non-market benefits, both locally and nationwide. There are a number of variables that confound soil loss cost estimates. Regardless of the difficulties, the majority of the studies recognize there is a cost of erosion to the farmer and society.

There is another category of costs not usually considered in a discussion of soil erosion. These are the costs to landowners caused by a decrease in their asset value. Landowners may be the farmers but increasingly they are not. In 2007, over half the farmland in Iowa was rented.

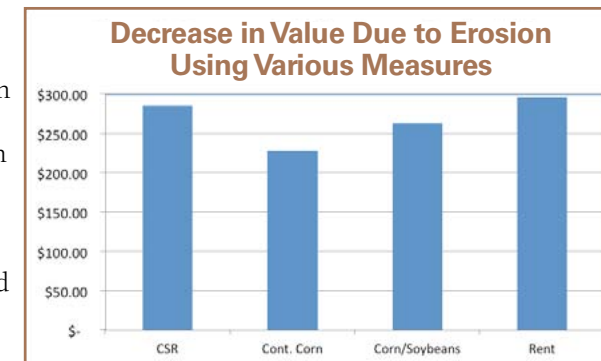
In this study, three methods were used to evaluate the cost of degrading a soil from one erosion phase to another: change in land value based on a lower Corn Suitability Rating (CSR); change in land value due to loss of yield potential (including continuous corn and a corn/soybean rotation); and change in land rent value, as of July 2011, due to the change in soil erosion phase.

These three methods produced similar results. The biggest difference is between the continuous corn estimate and the average of the rental methods with the difference of \$68 per acre or 30 percent. The lower impact for continuous corn was expected because the greater input costs associated with it reduces net returns. The corn/soybean rotation produced a \$33 or 13 percent difference between it and the loss due to erosion using the rental method.*

These analyses suggest it is possible to estimate the potential impact of erosion on land values. However, will erosion loss show up in the sale price of the land, or will erosion loss simply be a part of the overall price per acre because it is too difficult to separate the eroded and non-eroded land in a sale? In some cases, especially in highly erodible areas, if one farmed in such a manner as to prevent erosion, the soil would have an increased value.

If we are to truly consider the impact of erosion we need to consider what it does to the value of our investment. Too often we apply more fertilizer or other crop inputs masking the impact of erosion; we fail to account for decreased value of the land asset due to soil erosion. Higher expenses for the same yield mean lower profits, which lowers the value of the asset. Soil for the landowner is a bit like removing bricks from a wall; bricks can be removed one at a time without much trouble until one too many are removed and the wall collapses. A landowner can tolerate soil erosion a little at a time, but at some point it is going to cost and they won’t know what they’ve got until it is gone.

*Read the full report, including information on how the analysis was performed on the ILF website: www.extension.iastate.edu/ilf/conservationsoil



... PROFILE continued from page 2

tion” published by University of Iowa Press in 2001 and “Iowa’s Wild Places” published by Iowa State Press in 1996.

Kurtz was a long-time member of the Board of Directors of the Nature Conservancy, and his land will go into a land trust with the Iowa Natural Heritage Foundation. He is currently working with a young farmer to teach him the prairie seed business. He is involved in the Anderson Lake project, helping to plant prairie grass buffers around it. Kurtz believes in diversity in his life as well as on his land. Along with being a conservation farmer, a mentor, an author and a photographer, he also plays the mandolin and guitar.

... LAKES continued from page 1

The film features Iowans, not actors, who care deeply about where they live and their local water quality. It also features environmental experts from the Department of Natural Resources, Iowa State University and the University of Iowa. The film offers insight to what Iowans know, or don’t know, about water and water quality. Several were interviewed, à la Jay Leno’s “Jaywalking,” on the campuses of Iowa State, the University of Iowa and University of Northern Iowa.

Copies of “Out to the Lakes” are available at no charge by request. Contact Iowa Learning Farms; email: ilf@iastate.edu or by mail: ILF, 219A Davidson Hall, Iowa State University, Ames, IA 50011. Please include a mailing address in the request.

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To subscribe or change the address of a current subscription, write to Carol L. Brown, 219A Davidson Hall, Iowa State University, Ames, Iowa, 50011-3080, phone 515-294-8912, email: ilf@iastate.edu. Please indicate you are inquiring about the Iowa Learning Farms Newsletter and which format you prefer, electronic or print copy. Newsletter coordinators are John Lundvall, ILF Field Coordinator; Jacqueline Comito, ILF Program Manager; editor/production designer is Carol L. Brown.

www.extension.iastate.edu/ilf

... and justice for all

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Conservation Station 2011 tour

2011 highlights and observations:

- Corn on the cob is a natural resource
- Iowa has really beautiful weather and some days, not so much
- RAGBRAI riders from around the country love popcorn and love the Conservation Station
- Cy and Herky joined the Conservation Pack
- ILF staff love to see the “light bulb moments” in people of all ages!

80

Conservation Station & Lil’ CS events

3,200

Gallons of water used in the Rainfall Simulators

38

Number of recorded times kids asked, “Are the Conservation Dogs here?”

13,707

People reached at CS & Lil’ CS events

36

ILF school or outdoor classroom events

18,164

Miles the Conservation Station and Lil’ CS traveled in Iowa (and Minnesota)



In September, a soil core display was created for the learning lab in the Conservation Station. The four ft. tall cores were taken approximately 120-130 ft. apart on a hillside slope in Boone County to show soil depth and quality.