

# Water Source



Business, agriculture, recreation and communities — a partnership for water quality

## Meeting offers information for area residents

Local landowners and residents are invited to attend the Hillsdale Water Quality Project's annual meeting at 5:30 p.m. Jan. 27 at the Gardner Senior Citizens Center, 128 E. Park. The following topics will be discussed at the meeting, which is free and open to the public.

### Total maximum daily loads

If a TMDL sounds like something you would find on a food label, you may want to attend the Hillsdale Water Quality Project's annual meeting to learn more about how the Total Maximum Daily Load process may affect you.

"The TMDL process is a way of making sure the quality of water is meeting the standard," said Philip Barnes, research engineer in the department of biological and agricultural engineering with K-State Research and Extension. As part of the meeting, Barnes will give an overview of the TMDL process being implemented by the Kansas Department of Health and Environment.

"I will try to explain the process in basic terms that everyone can understand, what it may mean to achieve a TMDL and what different people will have to do to reach that TMDL," Barnes said. "By (the meeting), we should have specific information on areas within the Hillsdale watershed we need to concentrate on improving."

The TMDL process will involve setting limits on the amount of a pollutant that a water body can receive and still meet water quality standards. Therefore the process will evaluate all contributing point and nonpoint sources of pollutants, which could include everything from wastewater treatment plant effluent to chemical runoff from lawns.

Barnes will review the watershed's highest potential areas for loss of sediment and phosphorus and will detail best management practices that could minimize those losses.

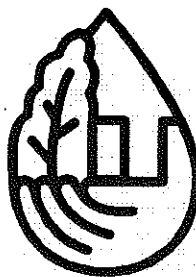
The TMDL process is expected to begin by July 2000 in the Marais des Cygnes basin, which encompasses the Hillsdale watershed.

"This meeting will be the start of our project's effort to educate local people about the state's total maximum daily load process. We want to be sure that when these standards are established, our residents and local leaders have an understanding of what their potential impacts are on our watershed," said Janet McRae, executive director of the project.

### Stream teams

Members and organizers of the Paola Boy Scout Troop 105 and Spring Hill Middle School stream teams will attend the annual meeting. They will share experiences and answer questions about their stream activities during the past year.

### Home safety evaluation tool available



Individuals who have questions about their home septic system, drinking water supply, lawn, garden or other environmentally related topics, now have a comprehensive resource available to keep on hand at home.

The *Kansas Home\*A\*Syst, An Environmental Risk-Management Guide for the Home*, produced by the K-State Agricultural Experiment Station and Cooperative Extension Service, will be available at the annual meeting.

### Home\*A\*Syst

This confidential, self-assessment tool helps individuals identify environmental conditions in and around their home that pose health and safety risks. Every home has potential pollution sources that can affect the health of family or community members. For example, drinking water can be affected by many potential contaminant sources: poorly maintained septic systems, leaky fuel tanks, lead pipes, fertilizers, pesticides and hazardous household products. The guide has 11 chapters of information and simple steps to follow to reduce health risks.

A special Johnson County edition contains important contact information and local regulations. *Home\*A\*Syst* guides are available through county extension offices and conservation districts. The cost is only \$7, or \$11 if it is mailed.

### Corporate business

A vote will be taken for two board members' positions that are expiring: John Leighty, a family/individual member, and Mike Howard, a municipal member. Both positions are three-year terms. A quorum of the corporation's membership will be required for this election.

# Check soil health before applying chemicals

While the green of spring seems far off, it won't be long before landowners start applying fertilizer to their lawns, gardens and crops. The best time to fertilize is in the fall. For those who missed that ideal timing and plan to apply fertilizer in the spring, taking a few simple precautions will not only make the application more cost-effective, but more environmentally friendly. Spring is the rainy season, so incorrectly applying chemicals can lead to contaminated runoff entering your local water supply.

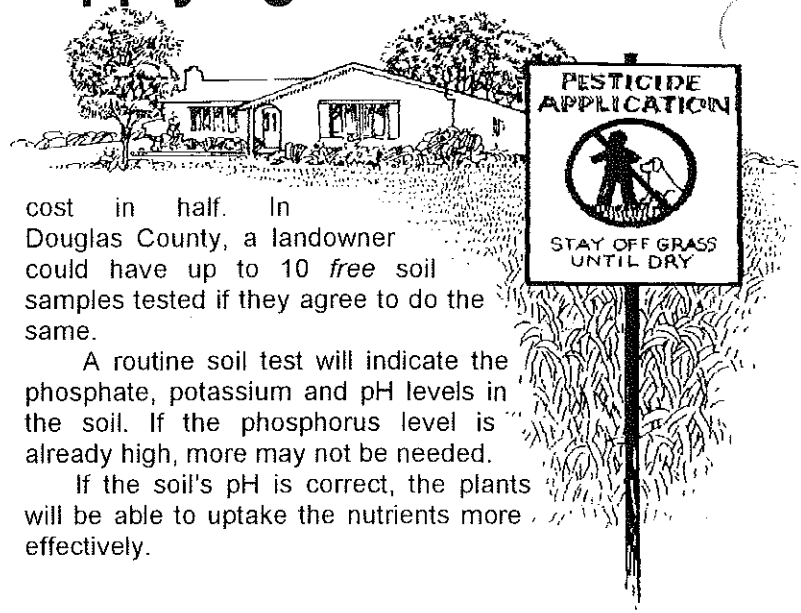
Although people have a tendency to think of agriculture in relation to chemical application, residential areas also contribute to chemical runoff.

"Rural people have a concern, but urban people do as well," said Phil Barnes, research engineer. "We see tremendous levels of nitrogen put on lawns, and a lot of them are over fertilized." Lawns can have a relatively hard surface. Homeowners typically spray the lawn then start the sprinklers. If too much water is applied or a storm hits, chemicals can run into a nearby pond, stream or storm drain. Here are a few tips to make better use of your fertilizer investment, while protecting the community's water.

## Test before you treat

Take a soil sample before applying any chemicals or organic fertilizers to determine which supplements the soil actually needs. Applying fertilizer without testing the soil is like taking a prescription before going to a doctor.

A routine soil sample only costs \$7.50 through county K-State Extension offices. Reduced prices may be available for those who are willing to follow the fertilizer application recommendations that result from the sample(s). In Miami County, agreeing "not to exceed the recommendations" could cut the



cost in half. In Douglas County, a landowner could have up to 10 free soil samples tested if they agree to do the same.

A routine soil test will indicate the phosphate, potassium and pH levels in the soil. If the phosphorus level is already high, more may not be needed.

If the soil's pH is correct, the plants will be able to uptake the nutrients more effectively.

## Plan the process

Landowners need to think ahead about what they are going to plant and whether they are going to apply fertilizer. Anyone planning to fertilize in the spring needs to consider incorporating the fertilizer into the soil at the root zone. Not only will this protect the water supply, but the nutrients will be more easily consumed by the plants. When fertilizer is applied dry, it is left on the surface where it is exposed to storms that could wash it away.

## Timing is key

Any spring fertilizing should be done early, before May, so rains don't cause it to run off into storm drains or streams. Check the weather forecast before any application. If rain is expected in the next 24 hours, wait to apply any chemicals.

## Contact Information

### K-State Extension Offices

Douglas County	785-843-7058
Franklin County	785-229-3520
Johnson County	913-764-6300
Miami County	913-294-4306

### Conservation Districts

Douglas County	785-843-4288
Franklin County	785-242-1109
Johnson County	913-764-1931
Miami County	913-294-3331

## Extension offers soils school

Anyone wanting to become more knowledgeable about soils and soil fertility is encouraged to attend the In-Depth Soils School from 9 a.m. to 3:30 p.m. Jan. 20 at the Douglas County Extension Center, 2110 Harper St. in Lawrence.

Ray Lamond and David Whitney, soil fertility specialists with K-State Research and Extension, will speak on the following topics: soil basics; plant growth and nutrient uptake; soil pH and liming; phosphorus, potassium and manure management; and secondary and micronutrients. The \$17 registration, which includes materials, refreshments and lunch, should be sent by Jan. 14. Call Johnson or Douglas County Extension offices for further information.

# Organic farmer's cover crops improve soil, water quality

As a fourth generation farmer, it didn't take Lee Quaintance long to opt for an organic operation.

"When I started farming on my own in 1990, I noticed for the first few years that I had to cultivate just to rescue the chemicals," Lee said from his Soaring Eagle Farm in Edgerton.

"I would put on dry fertilizer then a herbicide to hold the weeds back, but it just wasn't working. Each year one weed or another would blow through. I'd have a better stand of weeds than I would crop. I decided that if it was necessary to do all the extra work to control the weeds mechanically, I might as well get certified so that I could realize the premiums."

The last time Lee used chemicals on his crops was in 1993. He has since fulfilled the extra requirements to become certified by the Organic Crop Improvement Association. Everything he uses for crop inputs are natural, readily available products.

He farms about 300 acres of crops, such as spelt, rye, hairy vetch, red clover, corn, black turtle beans and natto beans. This year he also intends to plant buckwheat.

Lee has received cost-share assistance from the Hillsdale Water Quality Project for cover crops.

"I use cover crops for weed suppression, to reduce soil compaction, to increase organic

matter, to trap nutrients and provide nitrogen for the next crop.

"Cover crops also reduce erosion by holding the topsoil and keeping the nutrients from leaching out. That's where cover cropping really benefits the lake," he said, adding that they aren't too expensive, they don't require much extra management and they help yields of future crops.

Planning an effective crop rotation and determining the best cover crops to use takes some thought, he said. OCIA requires a six to seven year crop rotation. Lee plans to harvest seed from some of his cover crops to use in the future. This process adds to the sustainability of the cropping system.

Lee is considering the possibility of helping to start an organic dairy, and maybe grinding a little flour to package and sell direct. After growing up west of Gardner, Lee moved to Edgerton in 1990 when he married his wife Cindy. They have a 10-month old son, Nathan. In Lee's free time, he volunteers with Amateur Radio Emergency Services as a ham



Lee Quaintance, Edgerton, shows a handful of mixed rye and hairy vetch seed he planted as a cover crop.

radio operator and for the Emergency Communication Service as a storm spotter. He also gives living history demonstrations on blacksmithing at historical festivals.

## ✓ Mark your calendar

### January

- 6 Wetland Riparian Area Alliance meeting in Bldg. 21 of Douglas County Fairgrounds. (Contact Extension)
- 15 Grazing Land Management Workshop at Douglas County Extension office, open to surrounding counties
- 16 In-depth Soil School, Douglas County Extension
- 24 Miami County Conservation District Annual Meeting
- 26 Johnson County Conservation District Annual Meeting
- 27 Hillsdale Water Quality Project Annual Meeting, 5:30 p.m., Gardner Senior Citizens Center, 128 E. Park.

- 27 Franklin County Conservation District Annual Meeting
- 31 Douglas County Conservation District Annual Meeting

### February

- 11 Ag-Chem Fair, Douglas County Fairgrounds (Contact Extension)
- 25-27 Lawrence Garden and Home Show (Contact Douglas County Conservation)
- 26-28 Western Farm Show, KCMO (Contact Extension)

### March

- 25-26 Miami County Environmental Lawn & Garden Fair

# Water Source

CURRENT RESIDENT  
SPRING HILL KS 66083

*The Hillsdale Water Quality Project is funded by local private, corporate and municipal contributions, in addition to an EPA Section 319 Nonpoint Source Pollution Control Grant C9007405-98 administered by the Kansas Department of Health and Environment.*

## Members for the Millenium

All members are encouraged to attend the project's annual meeting at 5:30 p.m. at the Gardner Senior Center, 128 E. Park. Two board members' terms expire, so a vote will be taken for those positions. A quorum of the corporation's membership will be needed for this election.

### Families

*(\$20 annual contribution)*

- Tom and Kay Bach
- Jim Bell and Julie Lewis-Bell
- Francis and Eloise Bennett
- ★ Jared and Angi Bright
- Walter and Suzanne Dotson
- ★ Harold and Marilyn Erickson
- ★ Dale and Jean Everhart
- Dick Gibbs and Janet Johnson
- David D. and Diana Green
- Mr. and Mrs. Carl F. Gump
- Ed and Doris Haselrick
- Tony and Cathleen Holt
- John Leighty
- Robert and Janet McRae
- 💧 Danny and Diana Meisinger
- Ken and Annalee Nelson
- Richard and Alice Piezuch
- Paula Selby

### Individuals

*(\$15 annual contribution)*

- Eric Berlin
- Betty Chaney
- Daniel Guetterman
- Laura Hammond
- Marshall Hitchcock
- 💧 Al LeDoux
- Joseph Rowe
- Don Sneathen
- Allan Soetaert
- Judith Taggart
- 💧 Dick Weisser
- James Wilson
- Joe Yelton

### Small Business Members

*(\$100 annual contribution)*  
Drs. Hawks, Besler & Rogers  
Gardner National Bank  
JC Nichols, Dale Harsh

### Corporate members

*(\$250 annual contribution)*

- Executive Beechcraft
- Haz-Mat Response
- KCP&L
- Mr. Goodcents Subs & Pastas
- Niffie Printing
- Ponzer Youngquist, P. A.
- ★ Sprint

### Municipalities

*(Contributions vary)*

- City of Edgerton
- City of Gardner
- City of Spring Hill
- Miami County Conservation District
- Rural Water District No. 2 of Miami County
- Rural Water District No. 7, Johnson County