

Big Creek Advisor

A newsletter dedicated to the Big Creek Watershed Project



Say 'NO' to Tillage this Spring

Spring tillage is a tradition steeped deeply in American agriculture. But more and more farmers are realizing that this iconic tradition is costing them – in more ways than one.

Tillage comes at a high price. There are the known expenses like increased fuel and labor costs. But according to Rick Bednarek, state soil scientist with USDA's Natural Resources Conservation Service in Des Moines, the bigger, long-term cost may be the loss of soil health and function – resulting in lower yields, higher input costs and reduced drought resiliency for Iowa farms.

"Tillage is incredibly destructive to the soil structure and to the soil ecosystem," Bednarek said. "Healthy soil is 50 percent air and water – which is made possible by the pore space in the soil – and 50 percent mineral and organic matter. But tillage collapses and destroys that structure, making the soil vulnerable to erosion and compaction," he said.

The possibility of another dry year should also have producers rethinking their use of tillage, Bednarek said. "Because it destroys organic matter and soil structure, tillage actually reduces the soil's infiltration capacity," he said. "Studies have shown that each tillage pass can release a half-inch of soil moisture from each acre. Tillage tends to limit the availability of water in the soil, and that could prove very costly during those long, summer dry spells."

Fortunately, more and more producers in Iowa are farming with systems to build soil health, Bednarek said. "Using a suite of conservation practices, like no-till, nutrient management, and cover crops," he said, "they're keeping living plants in the soil as long



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Beans planted into no-till corn

as possible and they're keeping the soil surface covered with residue year round."

And according to Bednarek, the benefits of improved soil health extend beyond the farm. "Producers who improve the health of their soil are also increasing its water-holding capacity, which reduces runoff that can cause flooding. Improved infiltration keeps nutrients and sediment from being carried off-site into nearby lakes, rivers, and streams," he said.

Producers interested in learning more about the basics and benefits of soil health or receiving technical and financial assistance to implement a soil health management system, please contact their local NRCS office. Additional soil health information is available at www.nrcs.usda.gov.

Contact us Today! Schedule a site visit or a meeting to discuss your property and any conservation practices that may be suitable. Give us a call or stop by the Boone or Ankeny NRCS office.

The Second Annual Big Creek Appreciation Day—June 8

Location: Near the Marina at Big Creek State Park

Time: 10am-2pm

The Big Creek Lake Watershed Project and partners are hosting the Second Annual Big Creek Appreciation Day on June 8th! Bring out the family for a fun filled day at the lake and learn more about the watershed project, participate in fun activities and enjoy some **Free Food** provided by the Iowa Pork Producers Association.

Some of this year's activities will include pontoon boat tours, Iowa Learning Farm's Conservation Station, presentations put on by the Iowa Department of Natural Resources, and various educational booths hosted by local recreational and conservation groups just to name a few!



Free boat tours!



See—Touch— Learn about fish found in Big Creek



Learn about runoff and soil health

Back by popular demand will be the Iowa Learning Farm's Conservation Station. It is a mobile learning center that travels across the state teaching all Iowans how they can help to improve water quality and keep Iowa's soils in place—building a Culture of Conservation. Visitors to the Conservation Station can learn why Iowa's water and soils are precious and how to help preserve these natural resources for future generations. The Conservation Station's rainfall simulator demonstrates the effects

of rainfall on different land surfaces. Water runoff and subsurface drainage are collected in clear jars to show what is coming off the various soil scenarios including heavily tilled soil, minimum tillage and pervious pavement. **-More information to come as the event approaches!**

**For more information visit www.bigcreeklake.org
or contact**

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