15-1000 Cover Crop Education and Demonstration Project for the Bayou Bartholomew Watershed



RESEARCH & EXTENSION

University of Arkansas System

Key Personnel

Trenton Roberts Soil Fertility Extension Specialist <u>tlrobert@uark.edu</u>

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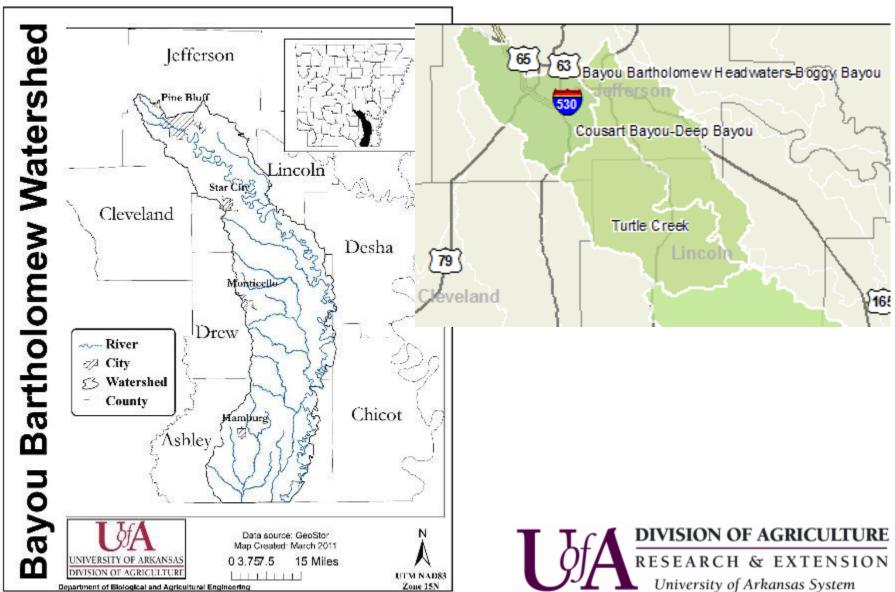
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Bayou Bartholomew



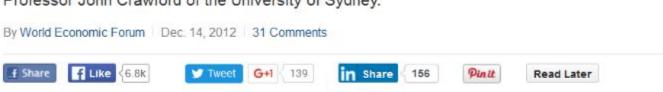
■ TIME



WORLD

What If the World's Soil Runs Out?

A broken food system is destroying the soil and fuelling health crises as well as conflicts, warns Professor John Crawford of the University of Sydney.



This is a "what if" interview from the World Economic Forum's Risk Response Network. To view the rest of the series, click here.

It's a strange notion, but some experts fear the world, at its current pace of consumption, is running out of useable topsoil. The World Economic Forum, in collaboration with TIME, talked to University of Sydney professor John Crawford on the seismic implications soil erosion and degradation may have in the decades to come.

Is soil really in danger of running out?

A rough calculation of current rates of soil degradation suggests we have about 60 years of topsoil left. Some 40% of soil used for agriculture around



Getty Images

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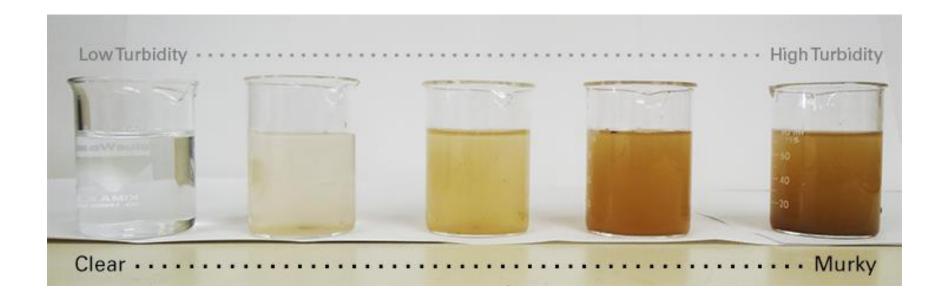


Sediment is the largest single nonpoint source pollutant and the primary factor in the deterioration of surface water quality.

Volume 1 • Number 1

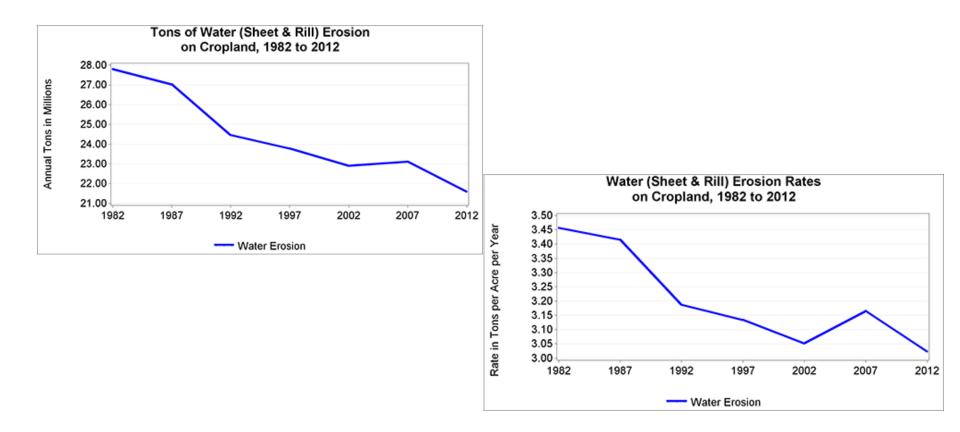


Turbidity





Arkansas Erosion Rates





Bayou Bartholomew Project Goals

- Increase Cover Crop Adoption in the BB Watershed!
 - Demonstration
 - Education
 - Workshops
 - Surveys
- Education is key! Many of these producers do not realize a problem even exists!



Advisory Committee

- Jeremy Ross- Extension Soybean Specialist
- Jason Kelley- Extension Small Grains Specialist
- Tony Ramick- ANRC Staff
- Mike Daniels- Extension Water Quality
- John Lee- NRCS Staff
- Keith Perkins- Lonoke County Agent
- Tim Smith- Southern Soil Solutions
- Robby Bevis- Producer
- Adam Chappell- Producer



Advisory Committee Role

- Expertise
- Provide guidance on program planning
- Help with Producer Workshops
- Help develop Producer Survey

 Provide <u>HONEST</u> feedback on areas of improvement- Education and Demonstration



Producer Survey

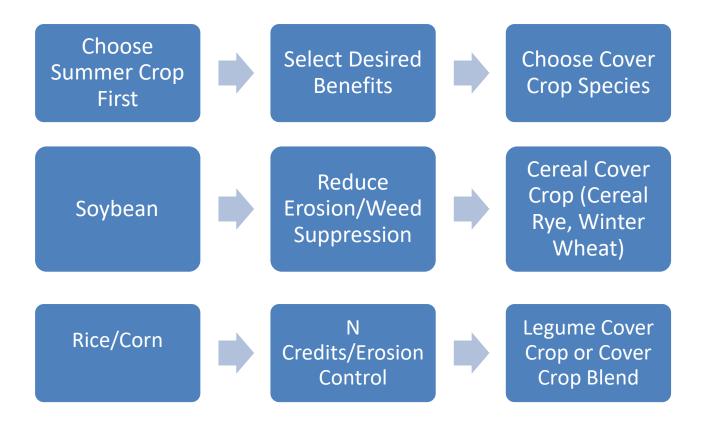
• Gain information on producer demographics

 Learn more about primary tillage and crop management practices

 Identify producer's knowledge level and perception of cover crops

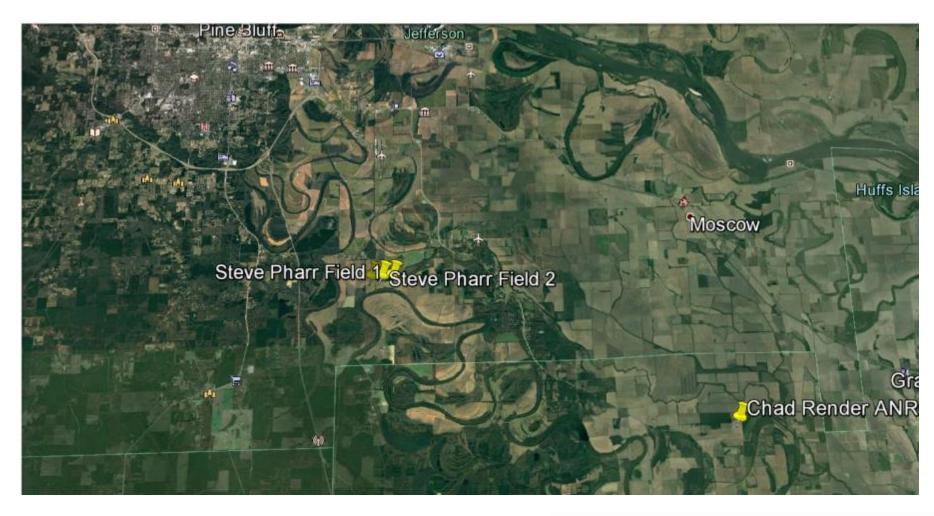


Management Plans are Critical





Locations for 2015-2016





Locations for 2015-2016





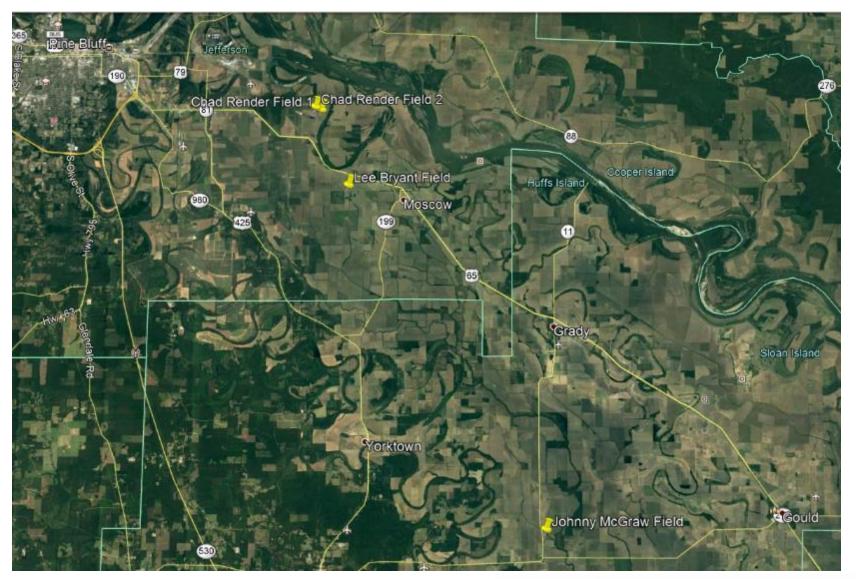
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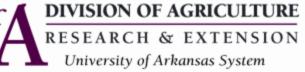
Locations for 2015-2016

- Late Start- Poor Results!
 - Project Started Oct. 1st
 - Seed Ordered Oct. 20th
 - Rain, Rain and more Rain
 - Planted last week of November
- Poor Cover Crop emergence
- Poor Plant Stands



Locations for 2016-2017





Cover Crop Workshops

- ½ Day Workshops to Educate Producers on benefits of cover crops (1 in both Lincoln and Jefferson Co.)
 - Introduce problem (Erosion)
 - Successful cover crop selection and management
 - Concerns with implementing cover crops
 - Success Stories (Robby and Adam)



JEFFERSON COUNTY COVER CROP FIELD TOUR









March 1st 8:30 AM Simmons Bank Parking Lot 101 Choctaw Ave. (Just off Hwy 11 near Hwy 65 Intersection) Grady, AR <u>Agenda</u>:

8:30 Welcome 9:00 Johnny McGraw Field 33°58'20.32"N 91°42'24.66"W 9:45 Lee Bryant Field 34° 8' 58" N 91° 49' 56" W 10:30 Chad Render Fields 34°11'28.7"N 91°50'54.1"W 11:15 Wes McNulty Fields 34°19'13.35"N 92° 1'28.90"W 12:15 Lunch- Wes McNulty Shop 4391 S McKinney Rd, Sherrill AR

> E-Mail Attendance for lunch count by February 27th to: djamies@uark.edu (please include name and affiliation)







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Future Plans

- Currently awaiting harvest on one of the fields and yield data on another
- Plan ½ day workshops in both Jefferson and Lincoln County to give overview of projects
 - Producer led presentations on their individual experiences
 - Educational presentations specific to producer interests



Questions?





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