

Nitrogen Management in the Missouri Bootheel

A partnership of the Bootheel Resource Conservation and Development, University of Missouri Extension, Natural Resources Conservation Service and the Conservation Technology Information Center (CTIC) has initiated an effort to bring information and technology assistance to the Missouri Bootheel to help raise awareness about and increase understanding of how increasing nitrogen use efficiency can provide economic and environmental benefits for farmers.

Goal #1: Increase awareness and understanding of basic nitrogen management **focusing on nitrogen.**

Goal #2: Increase adoption of Best Management Practices that maximize **nitrogen** use efficiency and decrease **nitrogen** losses from ag lands.

Goal #3: Identify and provide access to innovative technologies that can assist farmers with implementation of BMPs and increase of **nitrogen** management **efficiencies** on their operations.

Action Items:

1. Expand steering committee to coalition that includes commodity groups (corn, soybean, rice), Delta Center and Missouri Rice Research farm.
2. Identify needs for nitrogen management information and services in the Bootheel region. This involves compilation of existing information (from NASS and other sources) and could involve a new survey of Bootheel farmers about current nitrogen management practices and information/technology needs related to nitrogen management.
3. Develop a communications plan to increase awareness and understanding of nitrogen management (goal #1, #2), with focus on economic benefits of nitrogen management and, in particular, the necessity and usefulness of soil tests (what is it, why is it important, how to do it correctly and how to interpret and use the results). Includes compiling available information about nitrogen management, re-packaging, if necessary, and distributing through Coalition partners to reach every farmer in Bootheel.
4. Identify appropriate technologies that can help Bootheel area farmers with nitrogen management (goal #3). Includes: VRT for phosphorus, correcting pH, VRT/canopy sensors/real time technology for nitrogen, remote sensing irrigation and chlorophyll meters.
5. Provide demonstrations and/or research studies on these technologies at area research centers (goal #3).
6. Provide (with additional funding) soil sampling and stalk sampling to farmers (goal #1, #2). Includes education about importance of this practice and technical assistance/guidance based on results.
7. **Survey ag. producers in Stoddard and Dunklin Counties to determine their use of soil testing in making nutrient management decisions.**

NEXT STEPS

1. Contact potential coalition members to present an overview of this effort and seek their feedback and participation.
 - a. Scott will talk with Michelle about area representative for Missouri Soybean Association
 - b. Karen will look into other potential coalition members (coops, retailers, private industry, etc.) and refer back to the group
2. Compile information to help us understand extent of nitrogen management (soil test) adoption and nitrogen management needs in Bootheel.
 - a. Karen will investigate other sources of information
 - b. Warren will review the USGS report #88-495 and summarize and findings that might apply to nutrient management.
 - c. Bob will contact USGS and ask for their interpretation of that report as well as determine if there is any interest or need to update the study.
3. Karen will contact University Extension to gain their commitment and support to assume local leadership and establish a “point of contact” for the information/education component of the project and to provide nutrient management technical support from University Extension.
4. Warren and Scott will provide local project support to University Extension as needed in completing the action items.