

ABSTRACT

Remote sensing and associated spatial technologies provide tremendous opportunity to enhance agriculture and natural resource management and improve/protect the environment. These tools are invaluable for detecting invasive species, assessing climate impacts on crop productivity, and improving forecasting of crop yield based on more accurate prediction of weather patterns. Improvements in data streams and reductions in cost are enhancing acceptance and usage of remote sensing. NASA datasets are now being used to help predict crop yields worldwide through USDA, FAS. For example, a Mississippi-based company is using aerial imagery to develop maps of cotton growth rate, which guides scouts in sampling and spraying for insects, thus reducing pesticide loading in the environment and improving profits. Though challenges remain, advances in these types of decision support systems are making their use and availability more widespread.

SPEAKER BIOGRAPHY

Dr. David Shaw is Director of the GeoResources Institute at Mississippi State University, a recently-created institute that brings together the Mississippi Water Resources Research Institute, the Remote Sensing Technologies Center, the Computational Geospatial Technologies Center and the Visualization, Analysis and Imaging Laboratory. The Institute currently works with numerous federal agencies, including NASA, EPA, DoT, USGS, DoC, NOAA, DoD, and NSF. Dr. Shaw's research has focused on optimizing weed management practices to maintain farm productivity while improving surface water protection. More recently, he has focused on developing applications of spatial technologies in site-specific agriculture and in assessing natural resources. Dr. Shaw is a Fellow in the Weed Science Society of America. He received his Ph.D. in Agronomy-Weed Science from Oklahoma State University in 1985.

THE NATIONAL COALITION FOR
FOOD & AGRICULTURAL RESEARCH
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BREAK & A BRIEFING SEMINAR



THE NATIONAL COALITION FOR
FOOD & AGRICULTURAL RESEARCH

Program:

DOWN TO EARTH SCIENCE FROM OUTER SPACE

Applying NASA Technologies and Interagency Collaborations
to Advance Agricultural Science and Natural Resource Management

May 13, 2005

PROGRAM

Welcome and Introduction

JOSEPH H. LAYTON, JR., National C-FAR President

Moderator

DR. RODNEY BROWN
USDA Deputy Undersecretary for
Research, Education and Economics

Distinguished Speaker

DR. DAVID SHAW
GeoResources Institute, Mississippi State University

Open Forum

Closing

JOSEPH H. LAYTON, JR., National C-FAR President



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