



# Resilient Agriculture: Adapting to a Changing Climate

August 5-7, 2014  
Ames, Iowa

**SUSTAINABLE  
CORN.ORG**  
CROPS, CLIMATE, CULTURE AND CHANGE



United States  
Department of  
Agriculture

National Institute  
of Food and  
Agriculture



# CONFERENCE AGENDA

Tuesday, Aug 5

GARDEN ROOM

1:00 - 1:15 p.m.

## **Welcome and Opening**

Lois Wright Morton and Dean Wendy Wintersteen, ISU

1:15 - 2:00 p.m.

## **Keynote 1: CLIMATE CHANGE AND AGRICULTURE**

Jerry Hatfield, USDA-ARS

2:00 - 2:45 p.m.

## **Keynote 2: MIDWESTERN FARMERS ANTICIPATE AND RESPOND TO CLIMATE CHANGE**

Catherine Kling, ISU

2:45 - 3:15 p.m.

## **Break**

3:15 - 5:00 p.m.

## **THE SCIENCE OF RESILIENCE - Part 1**

Presentations and discussions moderated by Jim Gulliford, Soil & Water Conservation Society, Ankeny, IA

### **Nitrogen's Resiliency Role**

Rob Anex, UW

### **Carbon's Resiliency Role**

Rattan Lal, OSU

### **Water's Resiliency Role**

Jeff Strock, UMN

### **Regional Water Challenges and Opportunities to Increase Crop Resilience**

Jon Hobbs, Jet Propulsion Lab, NASA

### **Predicting the Impact of Increasing Temperatures on Corn Yield**

Bruno Basso, MSU

SOUTH PRAIRIE

5:00 - 6:30 p.m.

## **Poster Symposium and Reception**

Sponsored by Monsanto

NORTH &  
CENTRAL PRAIRIE

6:30 p.m.

## **Dinner**

BUS DEPARTS FOR OLDE MAIN

6:45 p.m.

## **Dinner for Next Generation Scientists and Next Generation Farmers**

Sponsored by United Soybean Board

# CONFERENCE AGENDA

Wednesday Aug 6  
Morning

BUSES DEPART FOR FIELD DEMONSTRATIONS  
8:30 a.m.

ISU FIELD EXTENSION EDUCATION LAB & SUSTAINABLE CORN RESEARCH SITE  
9:00 - 11:45 a.m.

## **Hands-on Field Demonstrations**

### **Drainage Water Management**

Jane Frankenberger (Purdue), Matt Helmers (ISU)  
and Shawn Wohnoutka (UMN)

### **Cover Crop Options and Management**

Eileen Kladvko (Purdue) and Charles Ellis (UM)

### **Corn Nitrogen Fertilization in a Rye Cover Crop System**

John Sawyer (ISU), Peter Scharf (MU) and Dick Wolkowski (UW)

### **Climate Tools for Corn Production**

Chad Hart (ISU), Dennis Todey (SDSU), Laura Edwards (SDSU),  
Chad Ingels (ISU) and Hans Schmitz (Purdue)

### **Soil Moisture and Water Infiltration**

Laura Bowling (Purdue), Scott Lee (ISU)  
and Marilyn Thelen (MSU)

### **Measuring Greenhouse Gases**

Vince Davis (UW), Becky Bailey (UW) and Javed Iqbal (ISU)

BUSES DEPART FOR GATEWAY CONFERENCE CENTER  
Noon



# CONFERENCE AGENDA

Wednesday Aug 6  
Afternoon

GARDEN ROOM

12:30 - 1:30 p.m.

## Lunch

1:30 - 3:15 p.m.

## THE SCIENCE OF RESILIENCE - Part 2

Presentations and discussion moderated by Paul Helgeson, GNP Company

### Cover Crops

Eileen Kladivko, Purdue

### Rotation and Tillage

Joe Lauer, UW and Emergson Nafziger, UI

### Crop Diseases

Darin Eastburn, UI

### Crop Insects

Michael Dunbar, ISU

3:15 - 3:45 p.m.

## Break

3:45 - 5:00 p.m.

## FARMER VIEWS ON ADAPTATION TO INCREASING WEATHER VARIABILITY AND EXTREMES

Session and panel moderated by Chad Ingels, ISU

### Video: Farmer Perspectives on Vulnerability, Uncertainty, Risks and the Impacts of Climate Change

### Survey Results: Farmer Perspectives

J. Gordon Arbuckle, Jr., ISU

### Panel: Corn Belt Farmers' Perspectives, Experience and Future Needs as They Adapt to Weather Variability and Extremes

*The Farmers:* Andy Bensend, Wisconsin  
Pat Feldpausch, Michigan  
Garry Niemeyer, Illinois  
Ray Gaesser, Iowa

5:45 p.m.

LOAD BUSES FOR REIMAN GARDENS

REIMAN  
GARDENS

6:00 p.m.

**Reception** - Sponsored by DuPont Pioneer

6:45 p.m.

**Dinner**

# CONFERENCE AGENDA

Thursday Aug 7

## GARDEN ROOM

8:00 - 8:30 a.m.

### **Keynote: AGRICULTURE & FORESTRY IN A CHANGING CLIMATE: ADAPTATION RECOMMENDATIONS**

Ernie Shea, 25x'25 Alliance

8:30 - 11:00 a.m.

### **CUTTING EDGE TECHNOLOGIES AND STRATEGIES FOR RESILIENT AGRICULTURE**

Presentations and discussion moderated by Fred Yoder, 25x'25 Alliance

#### **An Integrated Approach to Sustainability**

Ravi Sripada, The Climate Corporation

#### **DuPont Pioneer**

Ken O'Brien, DuPont Pioneer

#### **John Deere**

Pauley Bradley, John Deere

#### **Adapt-N: An On-Line Tool for Precision Corn Management**

Harold van Es, Cornell

#### **Crop Decision-making to Protect Soil and Water**

David Muth, Praxik

10:00 - 10:30 a.m.

### **Break**

10:30 a.m. - noon

### **DEVELOPING A SUSTAINABLE VALUE CHAIN**

Presentations and discussion moderated by Fred Yoder, 25x'25 Alliance

#### **Consumer Demand for Products with Light Environmental Footprints**

John Kadyszewski, Winrock International

#### **International Economies and Sustainability Protocols**

Mark Jackson

#### **Agribusiness Involvement in Improving Agroecosystem Environmental Performance**

Jean Payne, Illinois Fertilizer & Chemical Association

#### **USDA Climate Change Program**

Bill Hohenstein, Climate Change Program, USDA

12:15 - 2:00 p.m.

### **Lunch and Speakers**

**A VIEW OF THE FUTURE FROM CORN AND SOYBEAN FIELDS: WHAT DOES LONG TERM SUSTAINABILITY AND RESILIENCE LOOK LIKE AND HOW DO WE GET THERE?**

Garry Niemeyer, Former National Corn Growers Assoc. President  
Laura Foell