

# **Introduction**

## **Environmental Markets – New Approaches for Natural Resources Management**

**Steven E. Kraft**  
**Dept. of Agribusiness Economics**  
**Southern Illinois University Carbondale**  
**sekraft@siu.edu**



**Southern**  
**Illinois University**  
**Carbondale**

# Ecosystem Services

- **Ecosystem services are the goods and services derived from natural and managed ecosystems upon which human welfare depends**

# The Diversity of Ecosystem Services-Examples

- Fresh water
- Water supply and ground water recharge
- Flooding
- Habitat
- Soil
- Maintenance of air quality
- Noise abatement
- Nutrient storage and recycling (N, P)
- Pollution control and detoxification
- Pollination of crops
- Maintenance of biological and genetic diversity
- Eco-tourism, recreation
- Food and biofuels

## Wetland Ecosystem



Photo by Lynn Betts, NRCS USDA

## Riparian Ecosystem



Photo Courtesy of USDA NRCS

## **Working Agricultural Landscapes and Ecosystem Services: these Productive Lands Produce**

- Traditional Agricultural Commodities—these have well established markets**
- Ecosystem Services —in most instances these have no markets, hence they have no monetary values; consequently, landowners whose land generate these ecosystem services cannot derive a stream of income from providing them and they have no incentive to continue providing them**

# Ecosystem Services

- Changes in land use, e.g., result in changes in the flow of ecosystem services



Photo Gary Kramer NRCS USDA

# Our Speakers

- Dr. Silvia Secchi – Southern Illinois University – An Overview
- Dr. Bruce McCarl – Texas A&M University—Carbon Markets
- Dr. Brent Sohngen – The Ohio State University --Water Markets
- Dr. Stephen Swallow – University of Rhode Island--Habitat Markets
- Carl Lucero—NRCS Washington--Bridging the gaps to the NRCS mission.