Issues Facing the Illinois Fertilizer Industry

Illinois Fertilizer & Chemical Association

Supply • Service • Stewardship

IFCA's Mission Statement: To assist and represent the crop production supply and service industry while promoting the sound stewardship and utilization of agricultural inputs

1,100+ Members Including:

Ag Retailers

Fertilizer & Pesticide Manufacturers and Distributors

Equipment Suppliers

Input Consultants

Major Issues Facing Illinois Agribusiness

- **Controlling N & P Losses to Avoid Litigation**
- **Hours of Service Regulations**
- **The Sad State of Our State**

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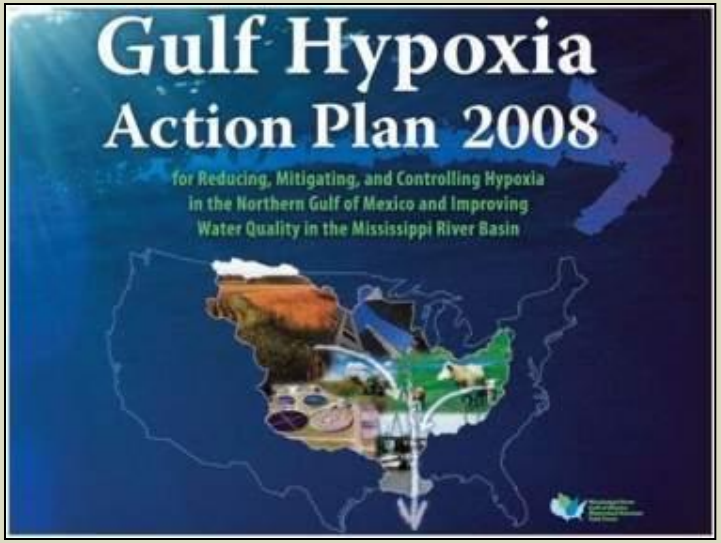
Water Quality Challenges

- **Hypoxia**
- **Nutrient Standards – Numeric Criteria**
- **Fall Applied Nitrogen Gets Most Attention**
- **Lawn care Industry seeing more regulations**

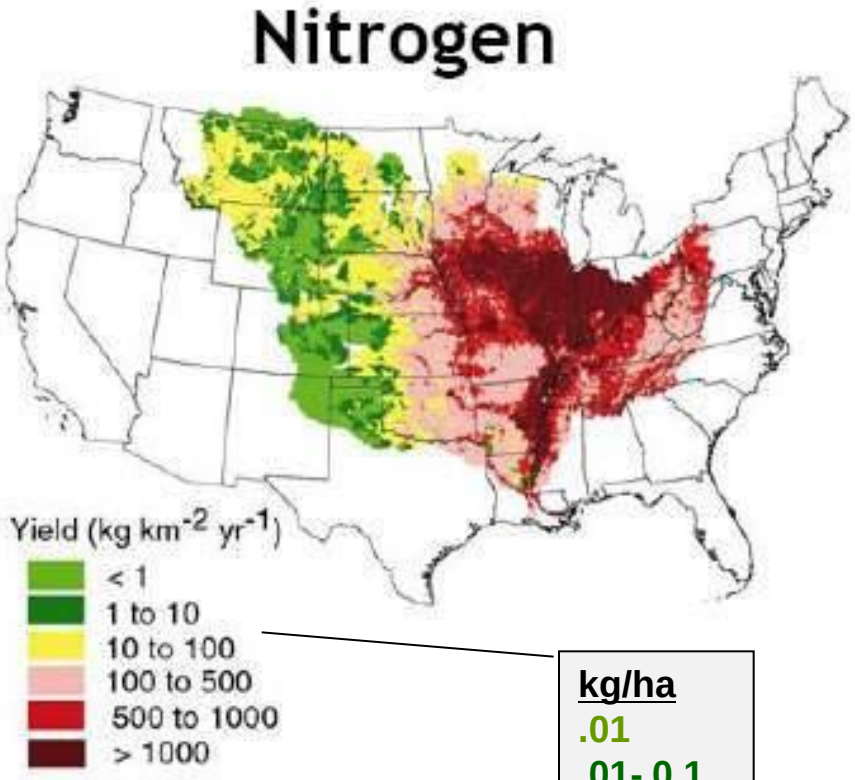
EPA Hypoxia SAB report suggested
45% less total N
AND
45% less total P
discharge to the Gulf to reduce hypoxia

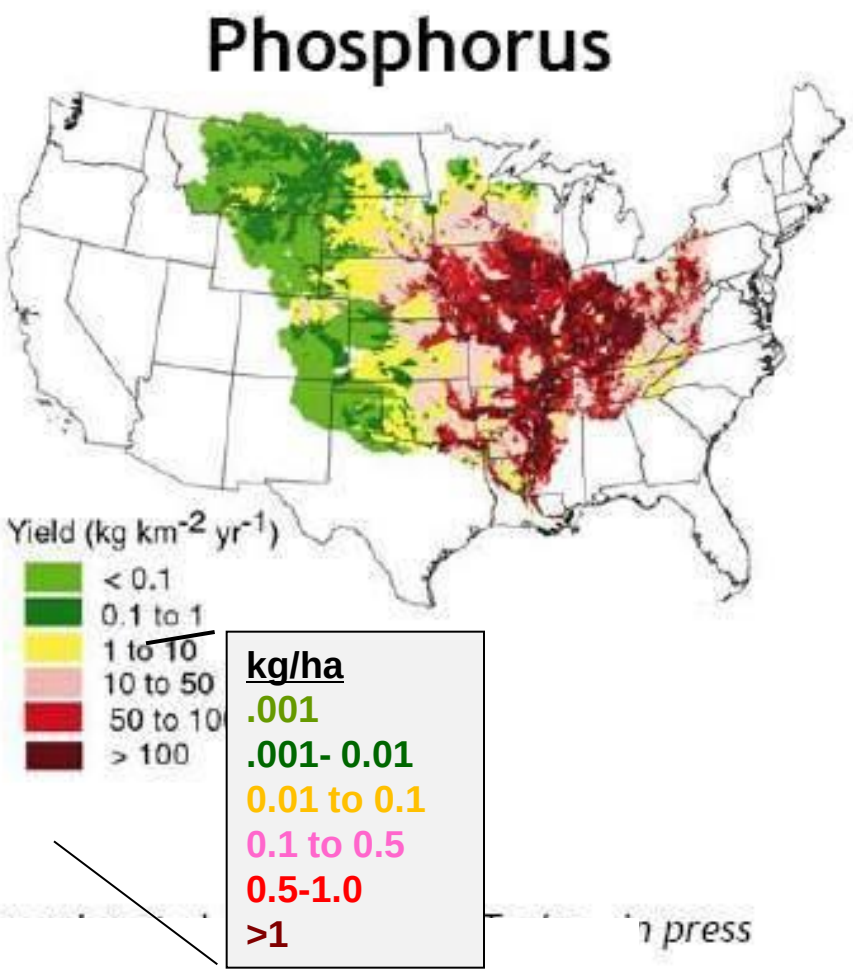


Is Illinois the Next Florida?

- Illinois EPA has challenged Illinois agriculture to reduce nitrogen & phosphorus losses
- Illinois Chapter of Sierra Club threatening to sue to set standards if agriculture does not develop a strategy
- IEPA Bureau of Water Chief is asking for a plan from the ag industry in the next 6-8 weeks; after that opportunity may be lost to control this issue.

USGS Estimates Loss of N and P and Delivery to the Gulf of Mexico





Alexander et al. *Environ. Sci. Technol. 2008, 42, 822–830*

Illinois' Crop Systems Make Controlling Nutrient Losses Particularly Challenging

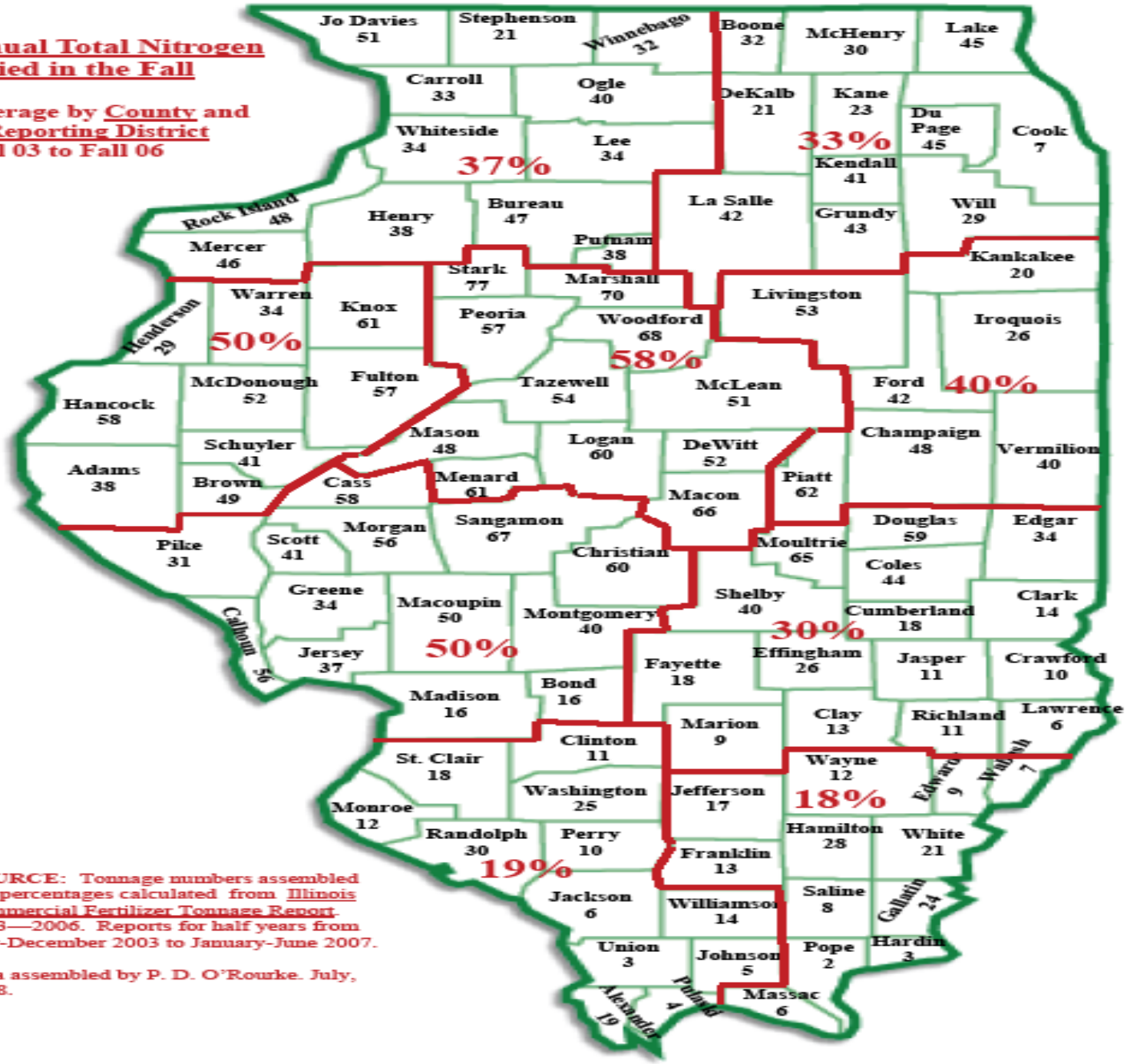
- Biggest Corn Counties are the Most Heavily Tiled

- **ILLINOIS IS AN AMMONIA STATE (60% NH3, 35% UAN, 5% Dry)**

- **In a “normal” year nearly 50% of all nitrogen goes down in the fall (350,000 tons approximately) in the form of anhydrous ammonia**

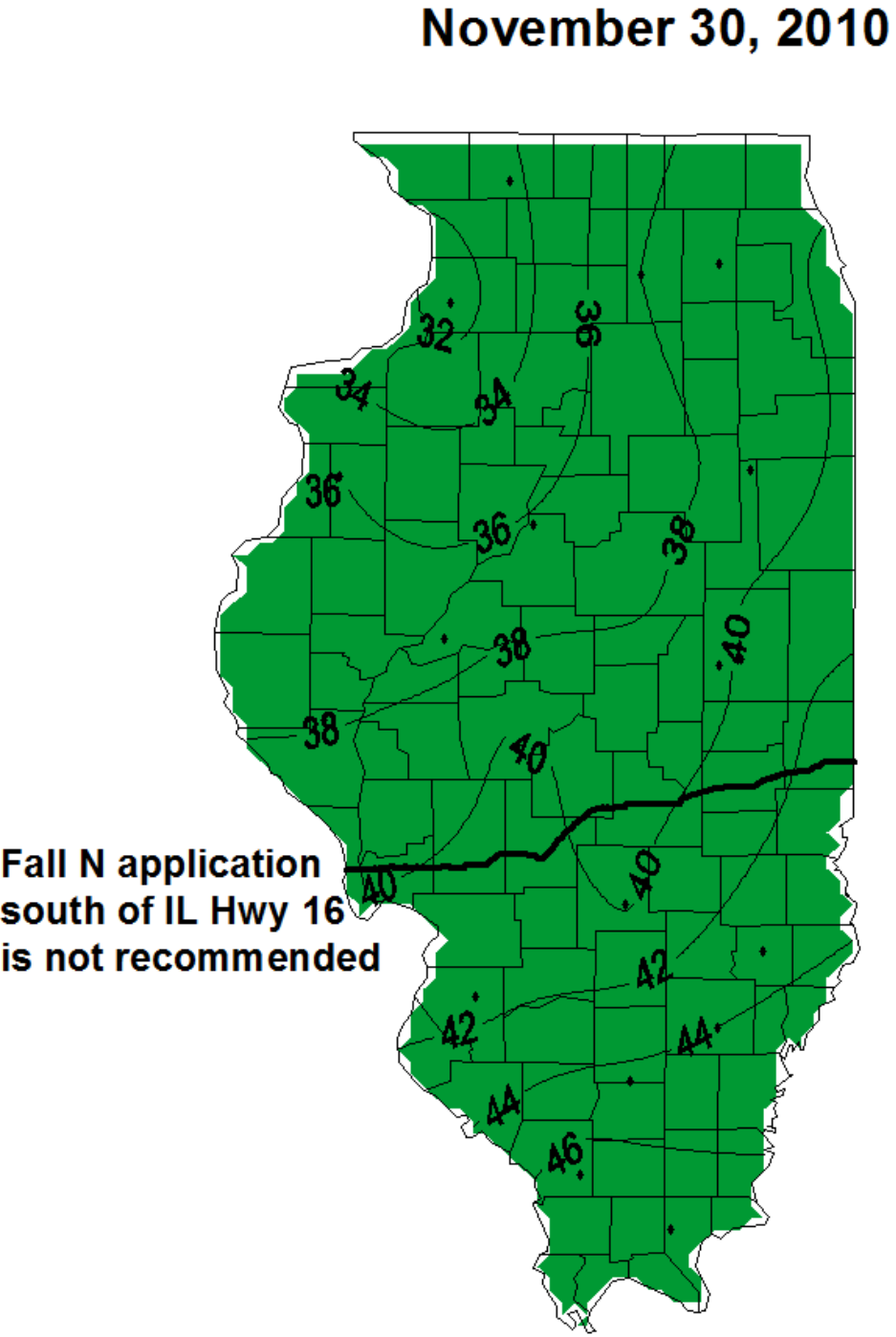
% of Annual Total Nitrogen Applied in the Fall

4-year Average by County and Crop Reporting District
Fall 03 to Fall 06



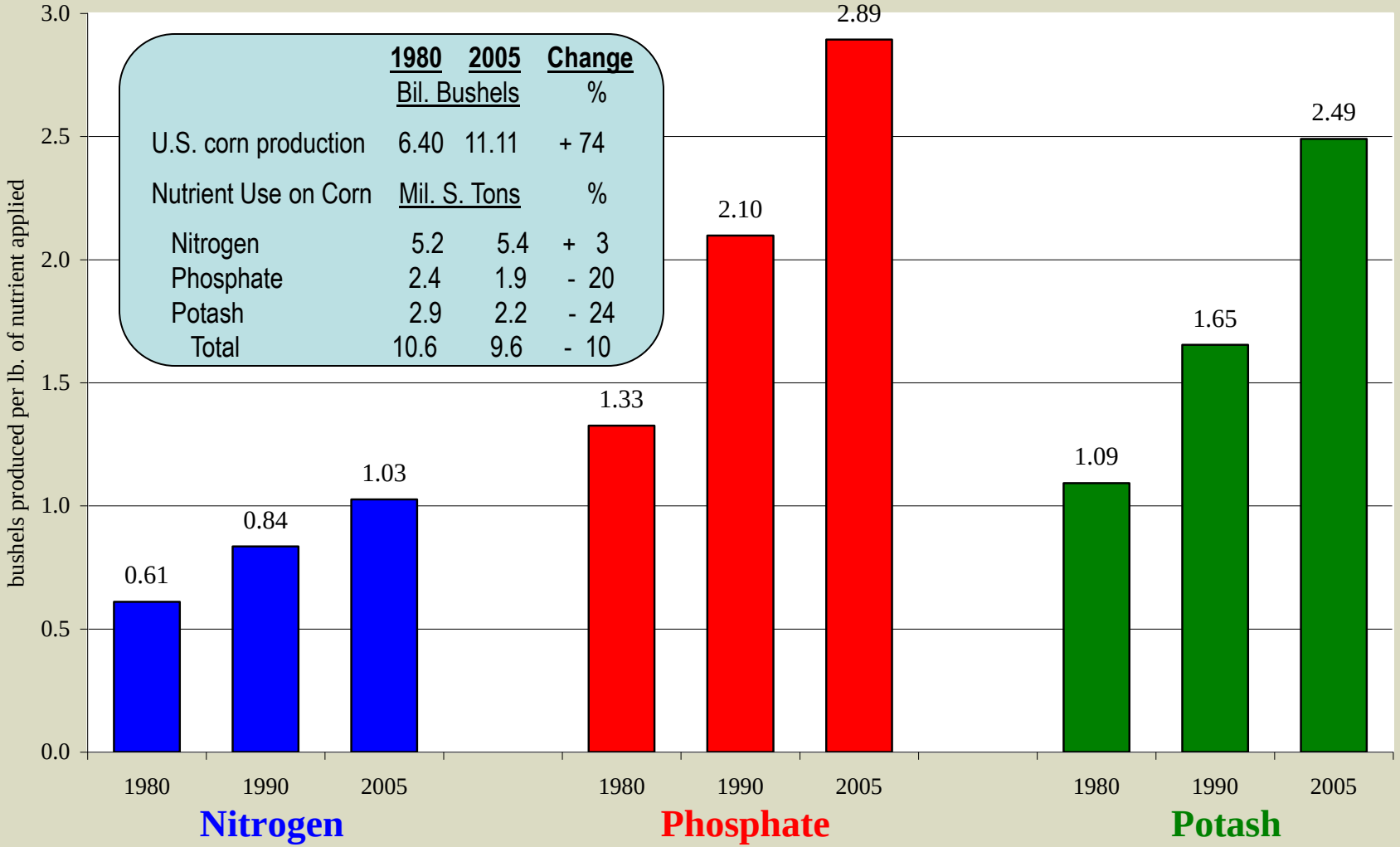
SOURCE: Tonnage numbers assembled and percentages calculated from Illinois Commercial Fertilizer Tonnage Report 2003—2006. Reports for half years from July-December 2003 to January-June 2007.

Data assembled by P. D. O'Rourke. July, 2008.



- IFCA Posts State 4 inch bare soil temps on our website
- Site is Red when soil temps are above 50 degrees
- Stabilize at 60 or wait until 50 is history; new recommendations call for waiting till 50 degree soil temps to start

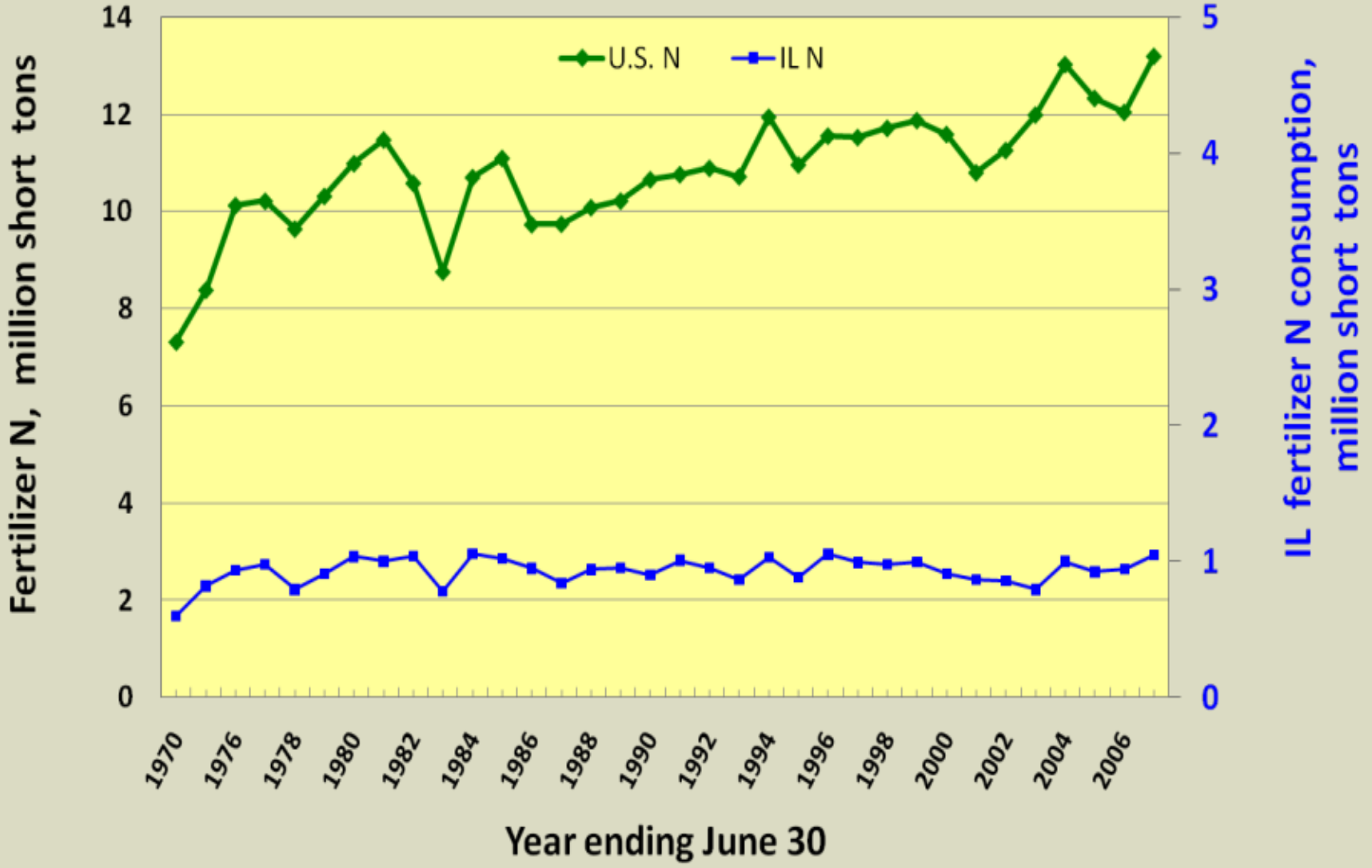
Nutrient Use Efficiency in U.S. Corn Production



	1980	2005	Change
	Bil. Bushels		%
U.S. corn production	6.40	11.11	+ 74
Nutrient Use on Corn	Mil. S. Tons		%
Nitrogen	5.2	5.4	+ 3
Phosphate	2.4	1.9	- 20
Potash	2.9	2.2	- 24
Total	10.6	9.6	- 10

Source: Computed by The Fertilizer Institute from data reported by USDA.

U.S. and Illinois Fertilizer N Consumption



Impact of Nitrogen Management on Corn Grain Yield and Nitrogen Loss on a Tile Drained Field

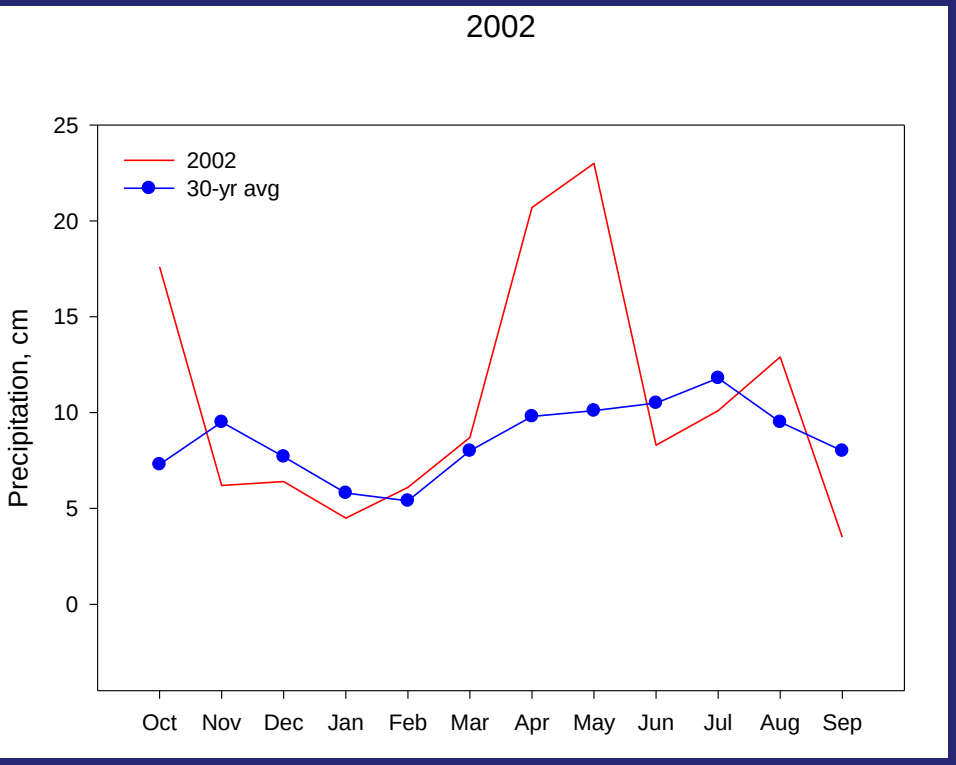
Matt Clover and Bob Hoeft

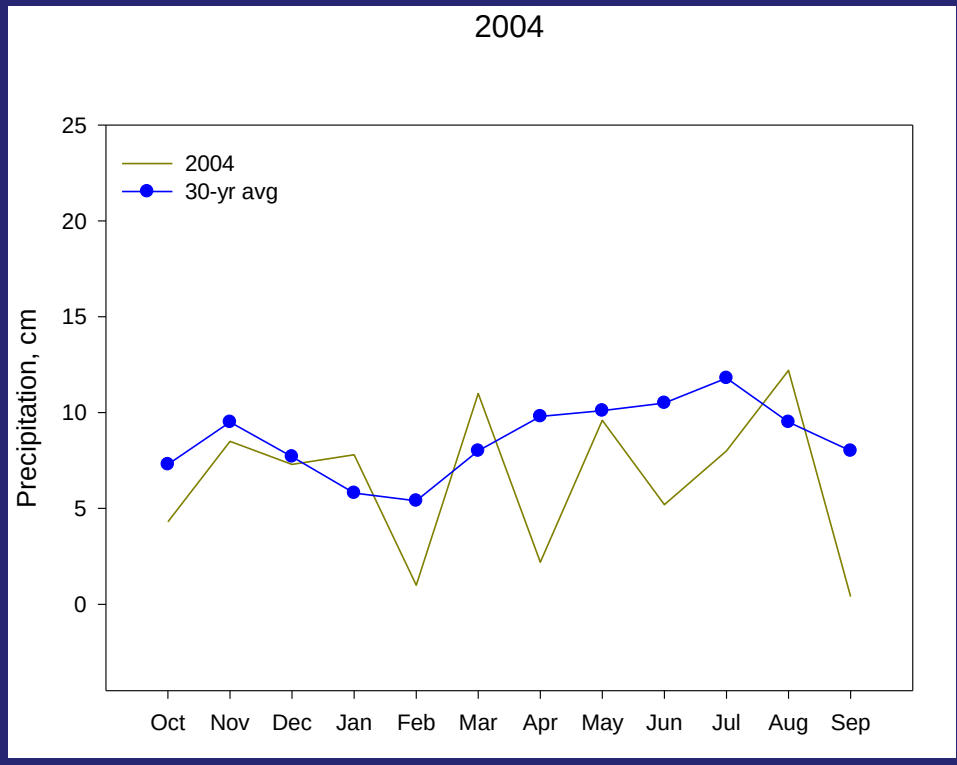
Objectives

- Determine the effect of time and rate of nitrogen application and use of nitrification inhibitors on nitrate concentration and content losses from subsurface tile lines and on corn grain yield

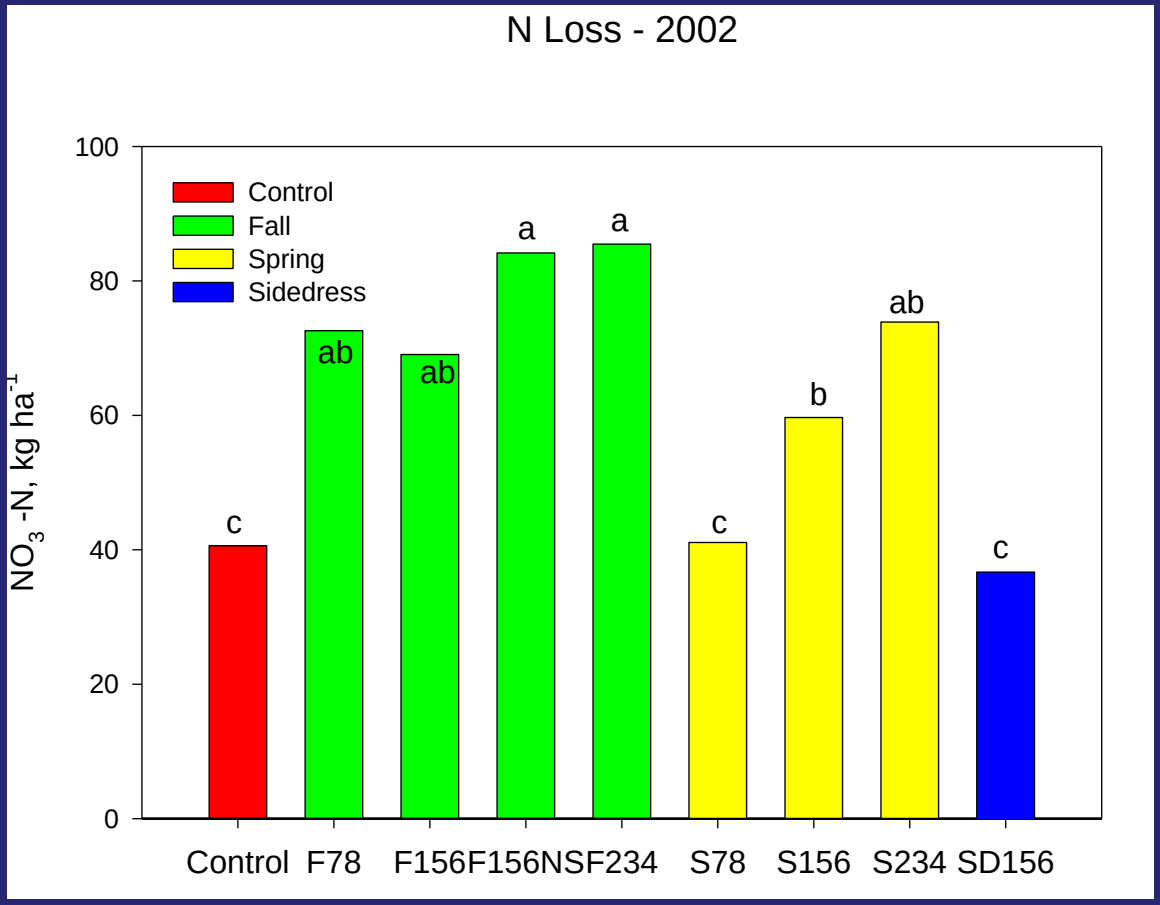
Climatic Conditions

Precipitation





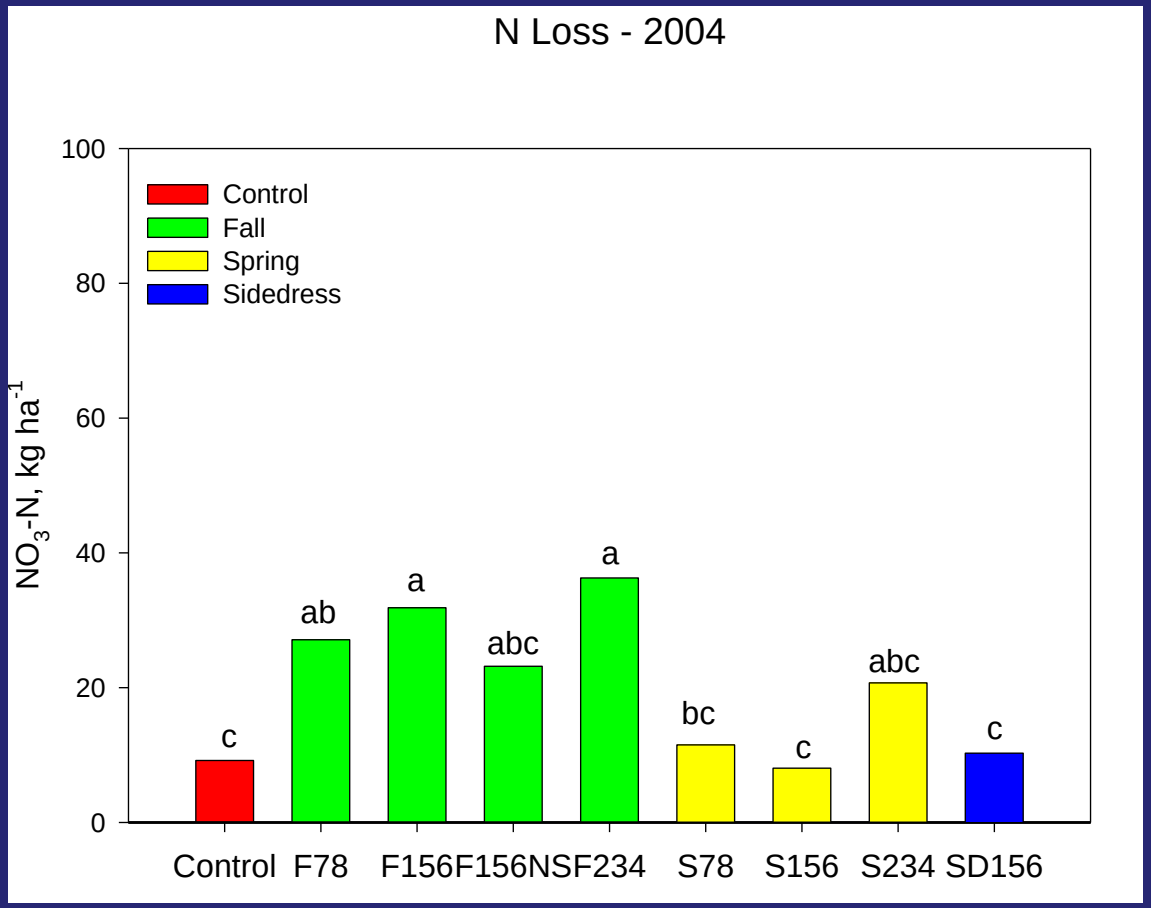
Nitrogen Loss – 2002 Corn



Contrast	Pr > F
Fall vs. Spring	0.0030

$LSD_{.10}$ = 18.30

Nitrogen Loss – 2004 Corn



Contrast	Pr > F
Fall vs. Spring	0.0007

$LSD_{.10}$ = 15.84

Results

- On the average, losses from the fall applications were significantly higher than those in the spring in both years

- The Sidedress treatment significantly decreased losses as compared to the Fall 156 kg ha^{-1} treatment in both years, and the Spring 156 kg ha^{-1} treatment in only 2002

Results

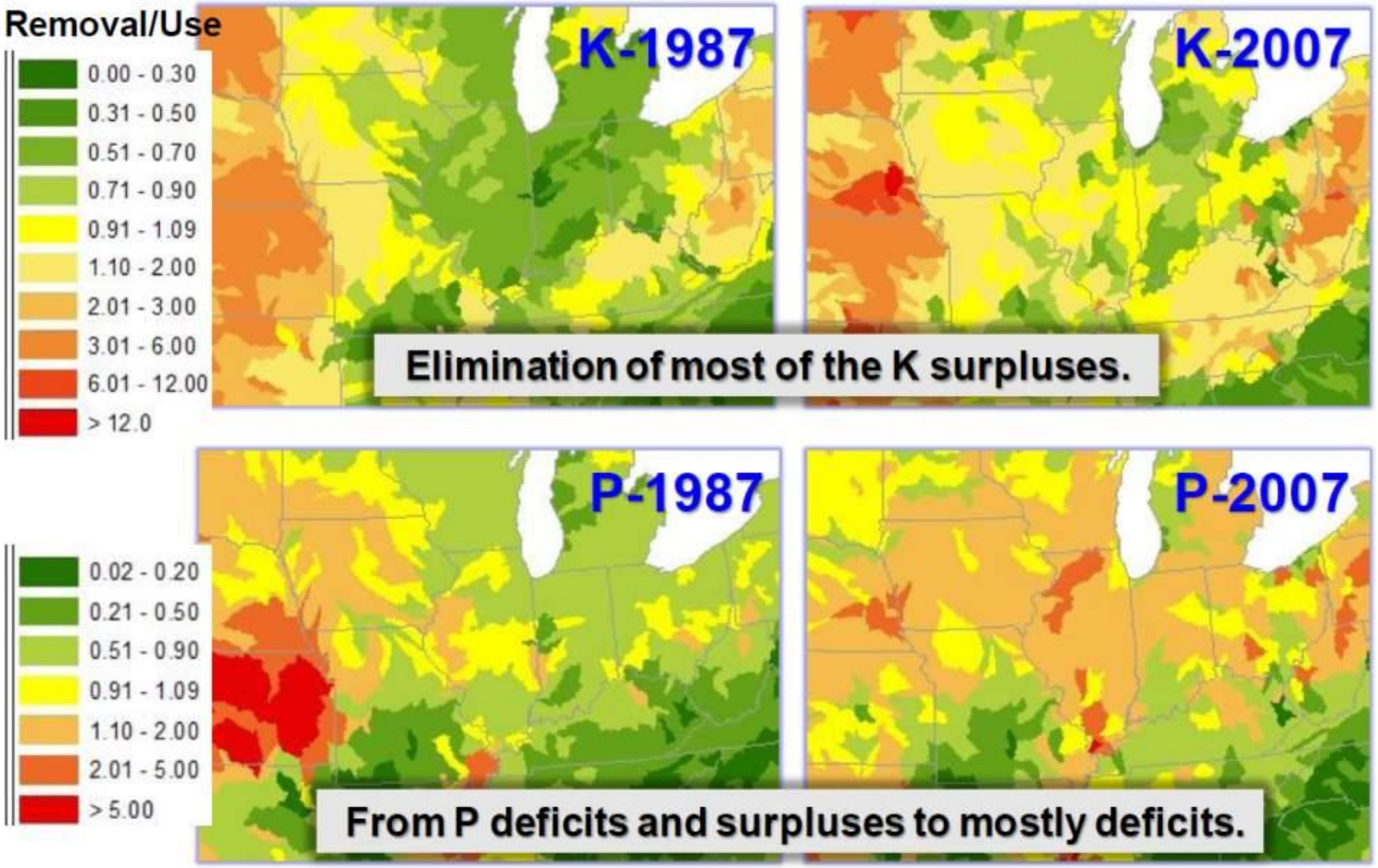
- A significant yield increase due to applied nitrogen over the control was seen in all three years regardless of season of application or use of nitrification inhibitors
- On the average, spring applications yielded significantly higher than fall applications in 2 of 3 years
- The use of N-Serve significantly increased yields over the Fall 156 kg ha^{-1} treatment in 2004
- A significant yield increase from the Spring 234 kg ha^{-1} treatment over the Spring 156 kg ha^{-1} was seen in both 2002 and 2004

Challenges on Nitrogen

- **IFCA Study:** Moving all N to Spring in Illinois would require a $1 billion investment in infrastructure at the retail level.

- This does not take into consideration possible higher N prices due to supply and demand situations in the spring

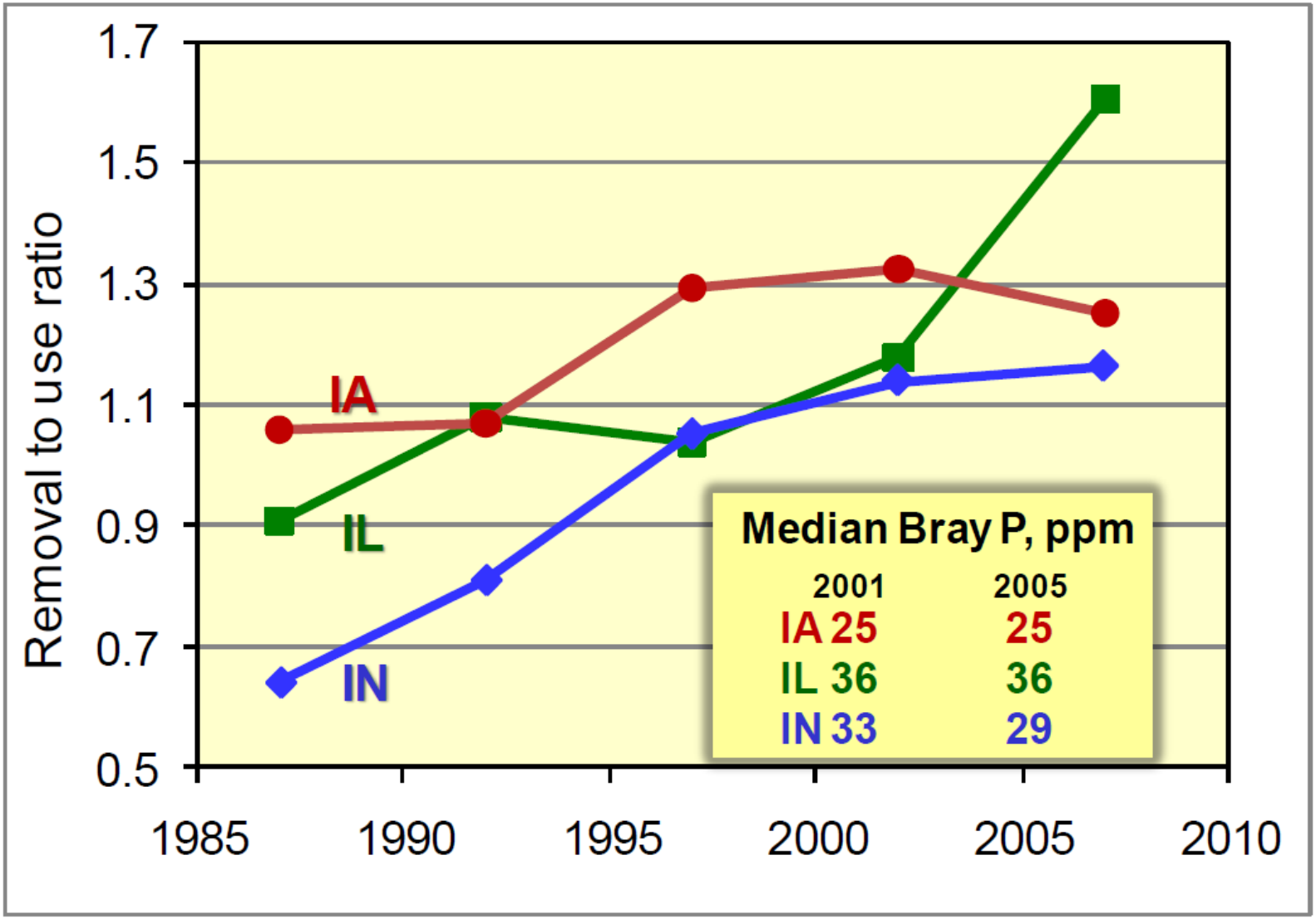
Changes in Corn Belt P and K Budgets



IPNI

Fixen et al. 2009. InfoAg

P removal to use ratios for the “I” states



Fixen et al. 2009. InfoAg

IPNI

Overall Nutrient Strategy

- Invest in research and education (IFCA has a plan)
- Encourage (eventually require?) farmers to develop a nutrient management plan based on 4R program
- Prioritize vulnerable watersheds where fall N in heavily tiled fields is an issue; encourage move to split and/or spring application to save fall N use in less vulnerable areas of the state
- Document our success; we've failed to do this in the past thus we get no credit for accomplishments

MORE FEDERAL ISSUES

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Ag Hours of Service Exception

- **FMCSA rescinded the exemption in late 2009 over interpretation**
- **This is CRITICAL to meets the seasonal demands.**
- **Illinois moved 33,460 cargo tanks loads from terminal to retail site in 2008 under this exception**
- **Focused so much on the problems associated with ammonia we didn't dream that FMCSA would not give exemption for liquid or dry fertilizer!**

Ag Hours of Service Exception

- **IFCA submitted extensive comments to FMCSA**
- **IFCA Board and Members Personally Visited FMCSA Director Anne Ferro**
- **FMCSA granted 90 day waiver for ammonia in spring 2010; gave 2 year waiver for ammonia in fall 2010 (just in time)**
- **With Congressman Oberstar defeated, hope to fix this problem for good, we have lots of support.**

The Sad State of Our State

NOT SINCE FDR

The Starting Point:

Illinois State Government is in the worst fiscal crisis since the Great Depression

- The backlog of unpaid bills is over $8 billion and continues to rise.

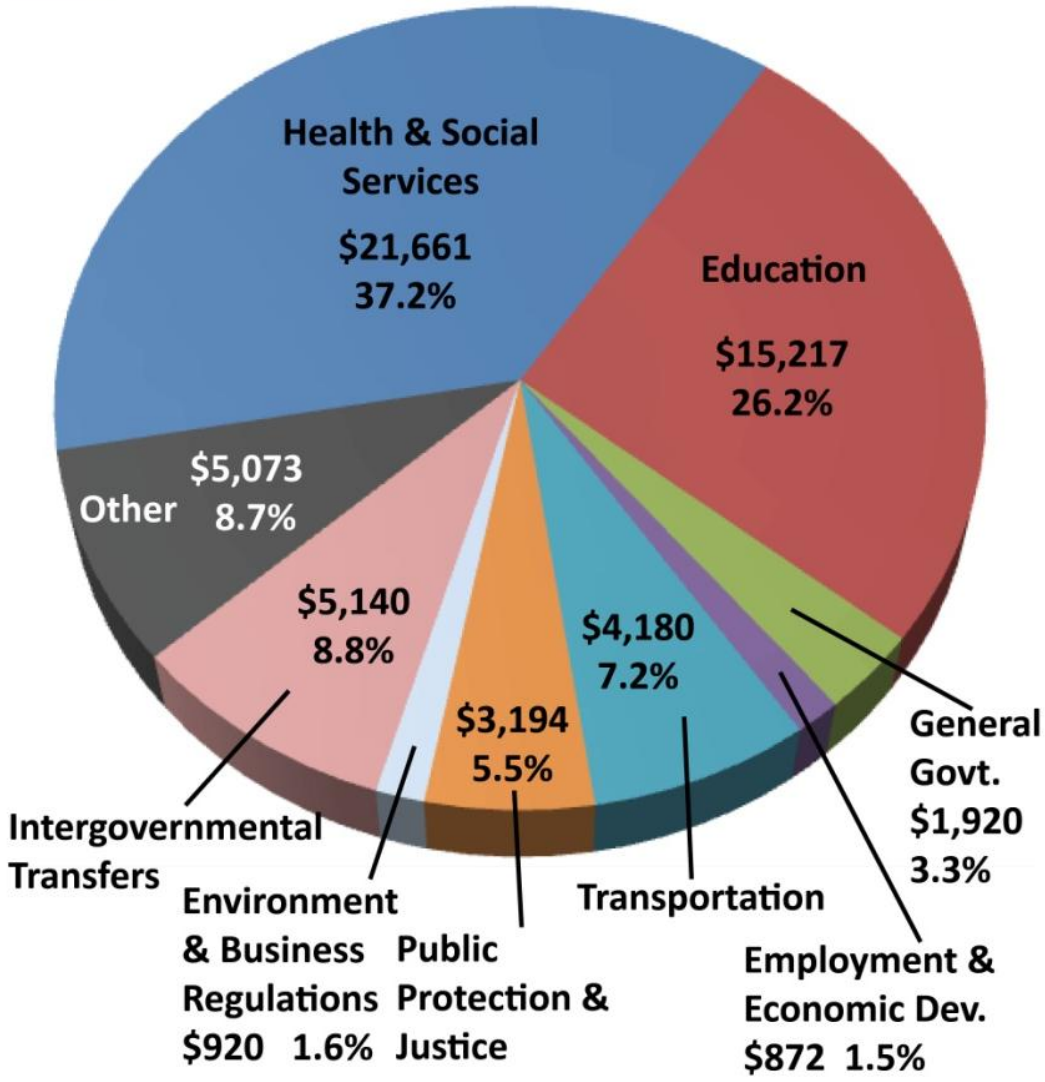
– Illinois businesses have not received 2008 or 2009 tax refunds owed to them.

5

Expenses FY 2008

($ in millions)

$58,177 Total



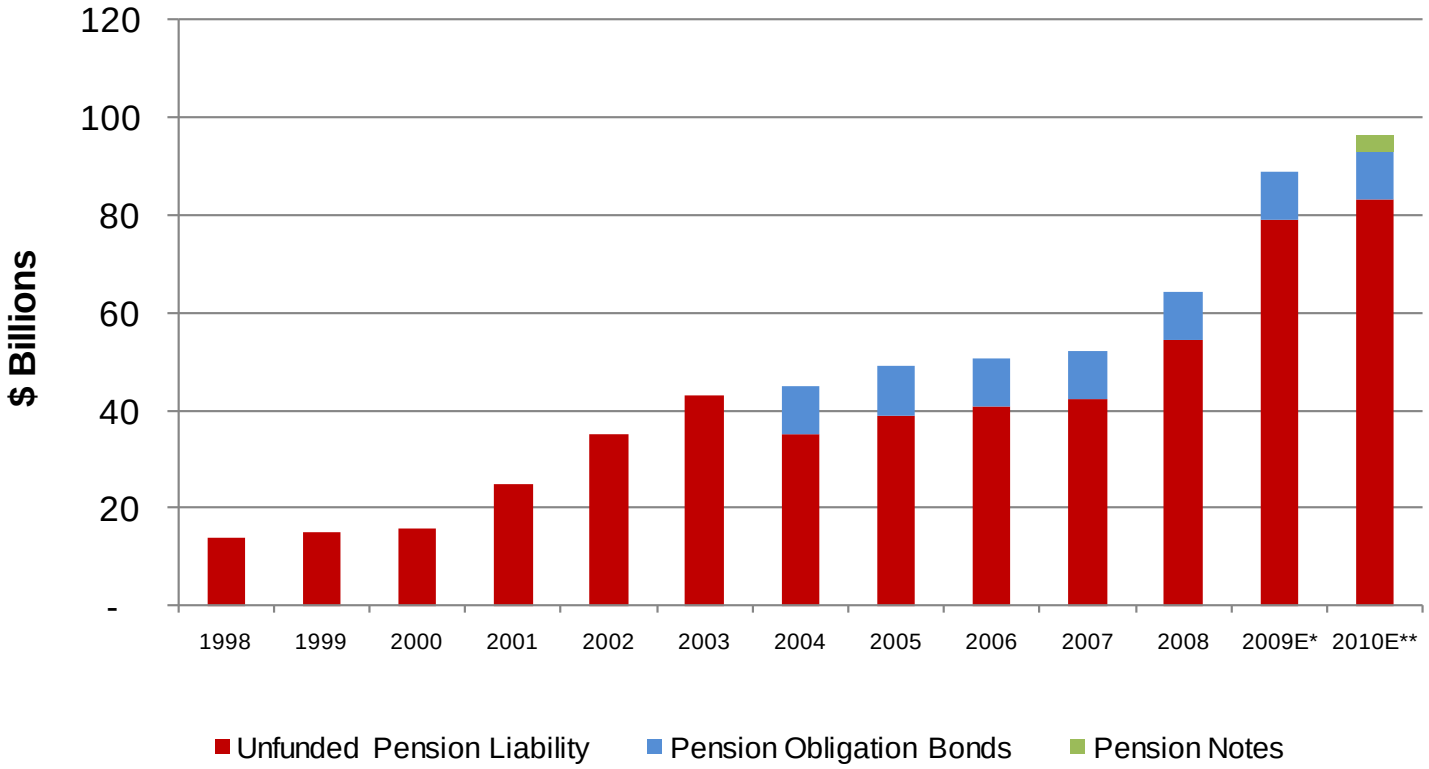
Source: *Comprehensive Annual Financial Report, 2008,* Illinois Office of the Comptroller, Springfield.

MANUFACTURING DECLINE

Between 1990 and January 1, 2008, Illinois lost 249,000 manufacturing jobs (a decline of 27%)

- **This loss was worse than both the Midwest (-23.2%) and the Nation (-23.9%).**

State Unfunded Pension Liability and Other Pension Debt



*Estimate is based on COGFA April 2009 Pension Briefing projection of $78.9 B unfunded liability at the end of FY2009.
**Estimate is based on COGFA April 2009 Pension Briefing projection of $83 B unfunded liability at the end of FY2010 and $3.5 B in pension notes issued in FY2010. The Governor's proposed $16 B in new pension bonds would not change the total amount of pension debt, but would convert approximately $16 B (minus transaction costs) of unfunded liability into pension obligation bonds.

Source: "2008 Bonded Indebtedness Report of the State of Illinois," January 2009, Commission on Government Forecasting and Accountability; Commission on Government Forecasting and Accountability Monthly Briefing, April 2009; "Report on the Financial Condition of the State Retirement Systems," February 2009, Commission on Government Forecasting and Accountability; Commission on Government Forecasting and Accountability Monthly Briefing, February 2009; "Report on the Financial Condition of the State Retirement Systems," February 2008, Commission on Government Forecasting and Accountability; "Report on the Financial Condition of the State Retirement Systems," July 2007, Commission on Government Forecasting and Accountability; Historical unfunded liability data from Senate GOP staff.

ILLINOIS' ECONOMY IS LARGE

The Context:

BIG 'N RICH

- **In 2008, Illinois ranked fifth nationally with a Gross State Product in excess of $633 billion (BEA).**

- **That would be the 27th largest economy of any nation in the world-greater than Egypt, Saudi Arabia, Colombia, Belgium, Sweden, Greece, Ireland, Portugal, Norway and Nigeria, to name a few.**

Illinois State Sales Tax

$8.5 billion in revenues

Average Annual Growth Rate	**1991 – 2000**	**6.3%**
	2001	**-1.1%**
	2002	**1.6%**
	2003	**0.1%**
	2004	**4.5%**
	2005	**4.2%**
	2006	**7.5%**
	2007	**0.6%**
	2008	**1.1%**
	2009	**-6.1%**
	YTD 2010	**-13.6%**

State of Colorado removed sales tax exemption for ag inputs this week

IL Dept of Ag Fee Increases

- From $20 to $30 for private applicators
- New fees for some other pesticide licenses
- $100 agrichemical facility containment permit fee
- Slight increase in scale inspection fees
- Increase in pesticide product registration fees

IDA faces another 15% budget cut; industry working to keep IDA viable.

What is Yet to Come in Illinois?

- Personal and corporate income tax increase; but will only raise $5 billion against a $15 billion deficit.
- Service tax could be proposed
- Elimination of exemption (ag inputs) could be proposed
- Big sucking sound as neighboring states have new Governors and legislatures with more business friendly attitude.

Pray for Illinois!