

MINUTES OF THE COMMITTEE ON HIGHER EDUCATION.

The meeting was called to order by Chairperson Deena Horst at 3:35 p.m. on February 19, 2003 in Room 231-N of the Capitol.

All members were present except: Representative Sloan, Excused

Committee staff present: Mary Galligan, Legislative Research
Paul West, Legislative Research
Jim Wilson, Revisor's Office
Mona Gambone, Committee Secretary

Conferees appearing before the committee: Prof. Chuck Rice, Kansas State University, Prof. of
Agronomy
Robin Kempf, Assistant General Counsel, Board of Regents
Mira Mdivani, Attorney; Immigration Law

Others attending: See attached list

Chairman Sloan was unable to be present at the meeting. In his absence, Vice-Chairman Horst chaired the meeting.

Chairman Horst introduced Prof. Chuck Rice who spoke to the Committee on carbon sequestration, the subject of a grant he is administering at Kansas State University (Attachment 1; other handouts to the Committee are available from the School of Agriculture, Kansas State University). Dr. Rice then responded the questions from the Committee.

Chairman Horst then called the Committee's attention to the balloon of **HB 2145** which Jim Wilson had prepared and distributed (Attachment #2). Representative Storm made the motion to adopt the balloon. Representative Huntington seconded the motion. After Committee discussion and clarification from Robin Kempf, and Mira Mdwani, the motion passed.

Chairman Horst then opened discussion on the bill. Robin Kempf and Mira Mdivani answered questions from the Committee. After clarification of language by Jim Wilson, Representative Hill made the motion to recommend the bill, as amended, favorable for passage. Representative Huntington seconded the motion. The motion passed. Representatives Johnson and Tafanelli asked to be recorded as having voted NO. Representatives Reardon, Carlin, Reitz, Phelps, Kuether, Hill, Huntington, Neighbor and Winn asked to be recorded as having voted YES. Jim Wilson offered to report the bill as **Sub. HB 2145**, rather than in its amended form. Chairman Horst asked Revisor Wilson to report the bill as suggested.

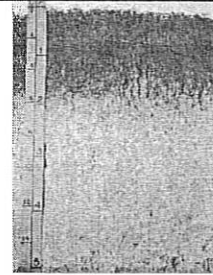
Chairman Horst called the Committee's attention to the minutes of the February 17 meeting and asked the members to call the Committee Secretary by 5:00 p.m. the following day or they would be considered approved as printed.

There being no further business, the meeting was adjourned at 5:05 p.m..

HOUSE HIGHER EDUCATION COMMITTEE GUEST LIST

DATE February 24, 2003

NAME	REPRESENTING
SUE PETERSON	K-STATE
Tisha Ruiz	Kansas Advisory Committee on Hispanic Affairs
Melinda Lewis	El Centro, Inc.
Mira Modivani	Klamann & Hubbard, P.A.
Robin Kempf	KBOR



Global Warming: Dust Bowl of the 21st Century? Is Carbon Sequestration the Answer?

Charles W. Rice
Director, CASMGS
Department of Agronomy

K-State Research and Extension

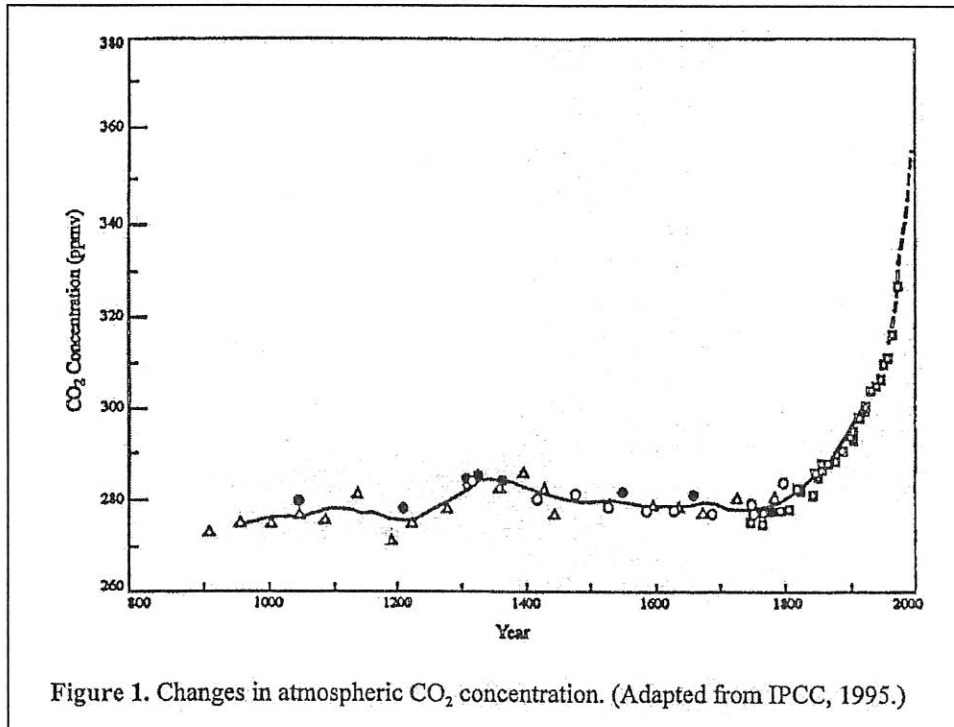
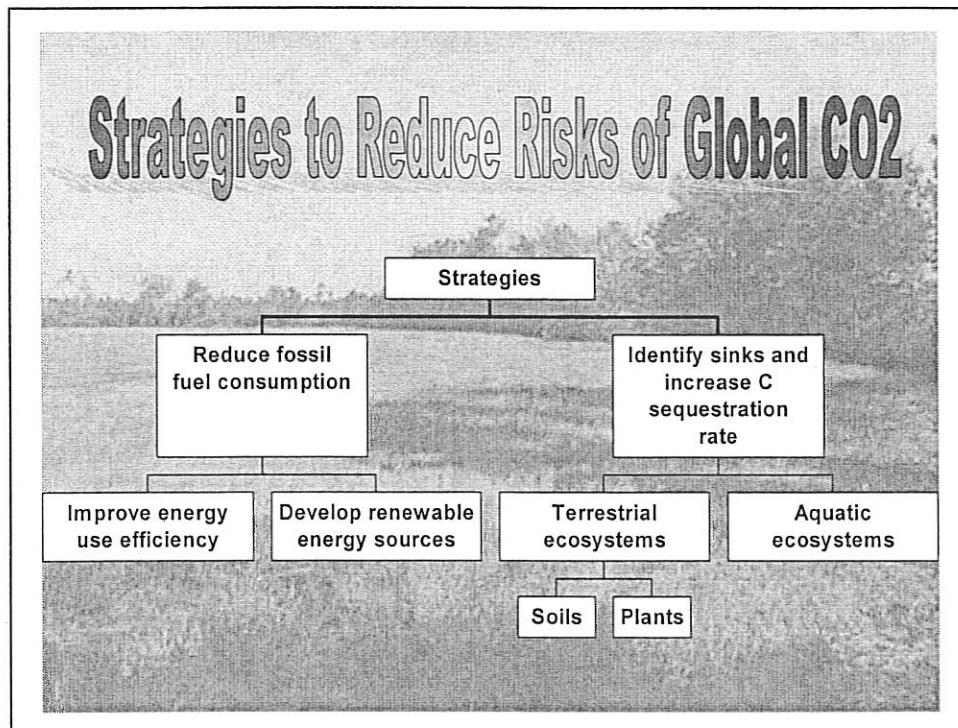
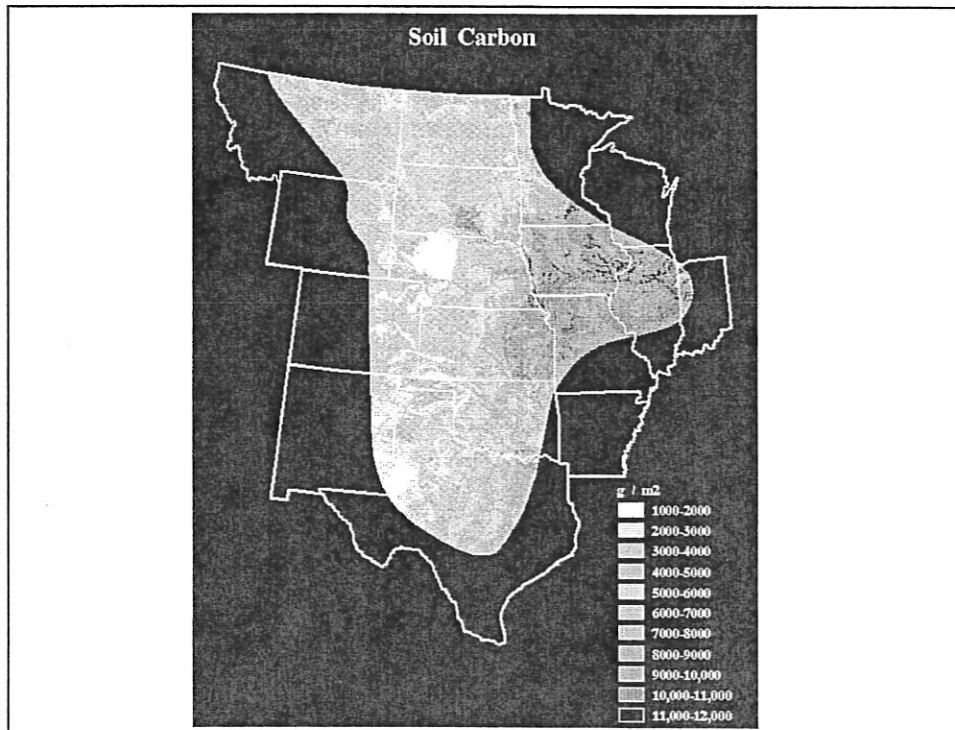
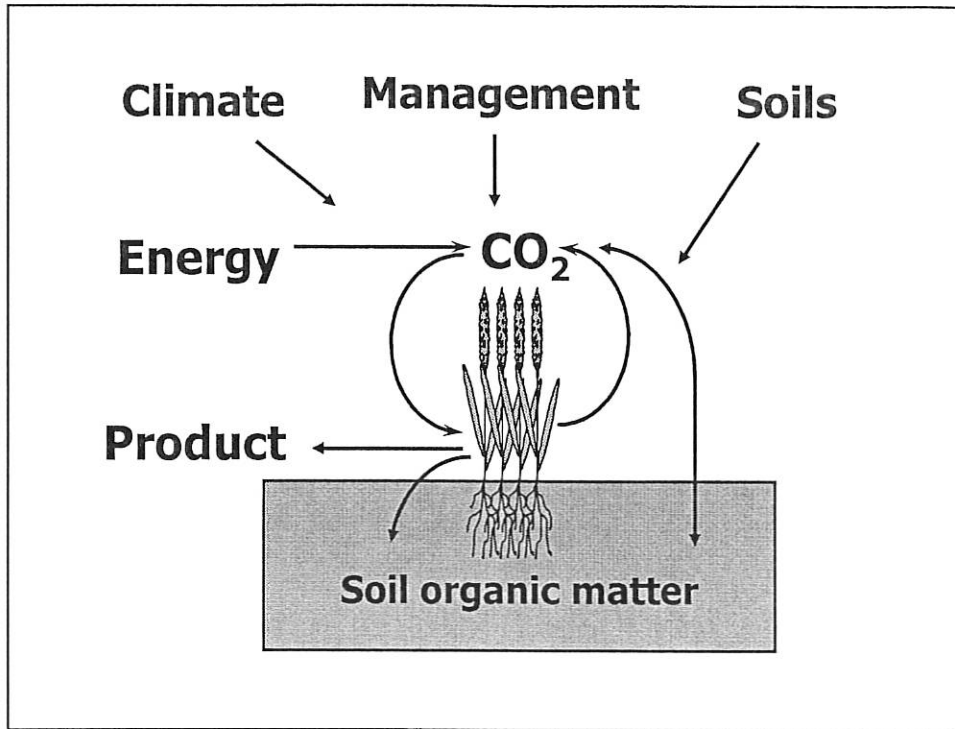


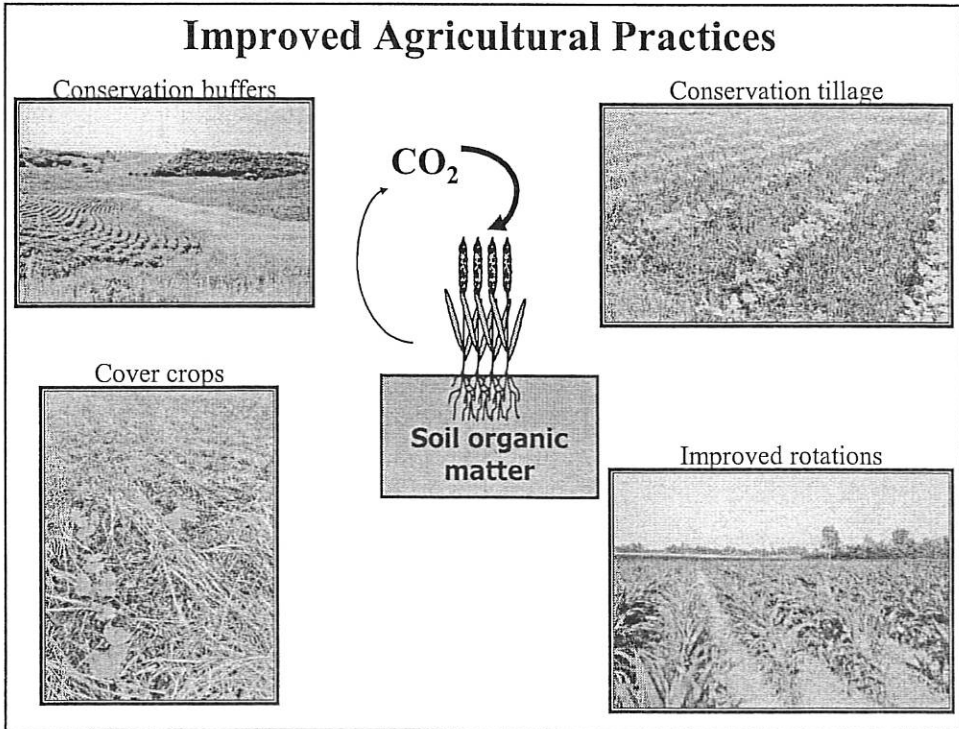
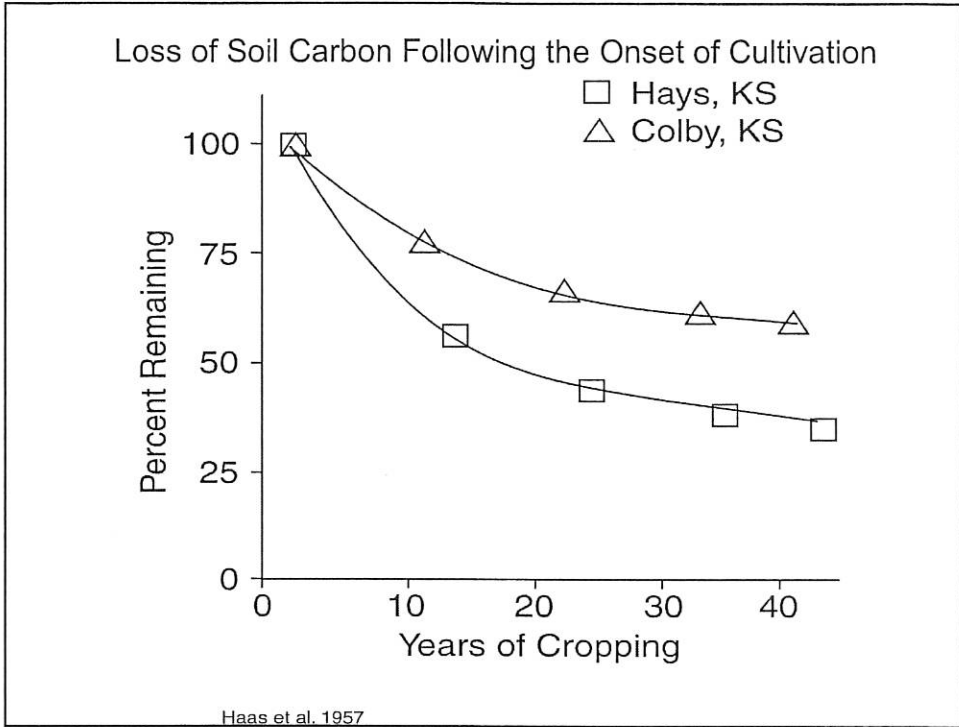
Figure 1. Changes in atmospheric CO₂ concentration. (Adapted from IPCC, 1995.)

Consequences of Increased Atmospheric CO₂

- Plants positively respond to CO₂
- CO₂ absorbs infrared radiation from the earth's surface: the greenhouse effect
- Temperature
 - Some areas greater heat stress
- Precipitation
 - Amount, distribution, frequency, intensity
 - Some areas will be wetter than normal, others drier
- Increased pests



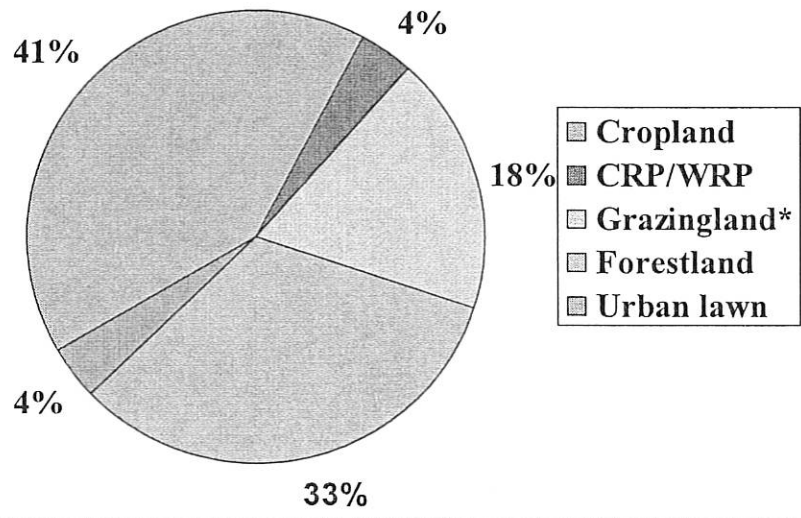




Land Use for C Sequestration Management Strategies

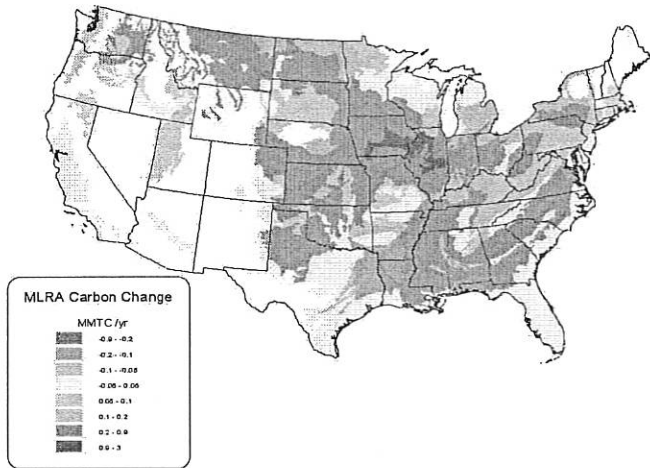
Land Use	Soil Management	Crop Management
• Cultivation	• Tillage	• Varieties
• Rangeland	• Residue Management	• Crop Rotations
• Forestry	• Fertility	• Cover Crops
	• Water	• CRP
	• Erosion Control	

Soil C sequestration potential of different US land Categories (% of 322 MMT C/yr) **

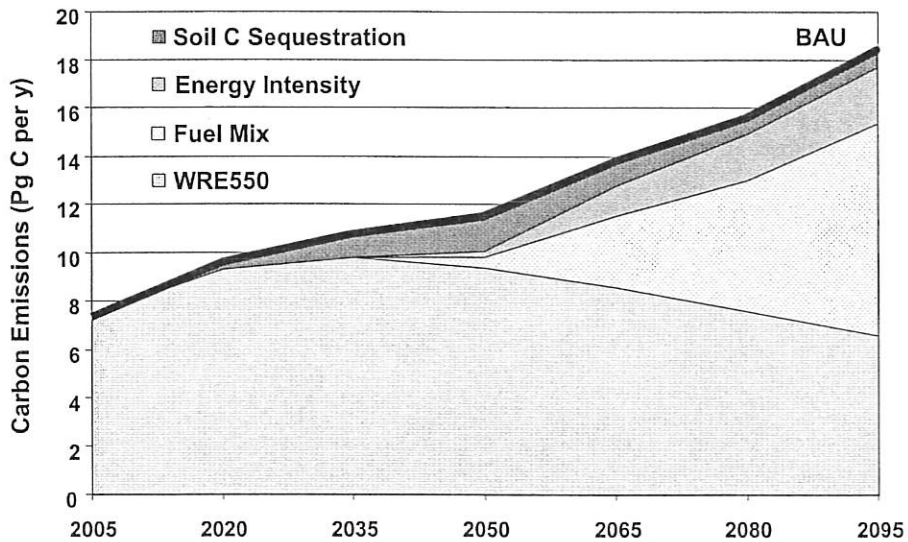


Preliminary inventory results

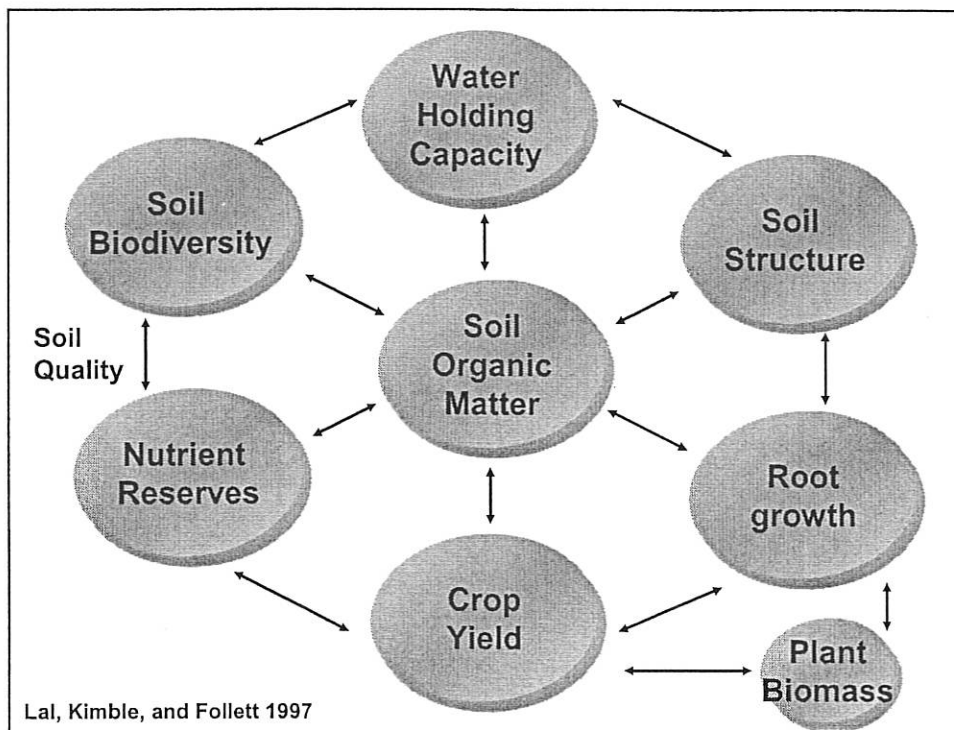
21.2 MMTC yr⁻¹ on 149 Mha cropland



Carbon Emissions Reductions: WRE 550 with Soil Carbon Sequestration Credits



From: Rosenberg, N.J., R.C. Izaurralde, and E.L. Malone (eds.). 1999. Carbon Sequestration in Soils: Science, Monitoring and Beyond. Battelle Press, Columbus, OH. 201 pp.



Value of Soil Organic Carbon

- Value of N, P, K, and H₂O in kg of humus about = \$0.20
- Does not seem like much but converts to about \$1900 per acre when you have 1% carbon in your soil!
- So if you increase by 0.1% would be \$190 per acre.

Consortium for Agricultural Soil Mitigation of Greenhouse Gases

- *To provide the tools and information to successfully implement soil carbon sequestration so that*
 - *the accumulation of greenhouse gases is lowered in the atmosphere,*
 - *while providing income and incentives to farmers and improving the soil.*

Kansas State University
Iowa State University
Montana State University
Ohio State University
Texas A&M University

Colorado State University
Michigan State University
University of Nebraska
Purdue University
Pacific Northwest National Labs

CASMGS

- Improve understanding of basic processes of soil C sequestration and greenhouse gas emissions.
- Evaluate and make recommendations for 'best management practices' to reduce net greenhouse gas emissions from soils
- Predict and assess C sequestration and greenhouse gas emissions
- Provide field and farm-level decisions support tools
- Evaluate alternative national economic and policy strategies
- Determine impacts of mitigation programs on crop production potential, food security and environmental quality

CASMGS

- Provide tools for quantifying and verifying soil carbon sequestration rates and greenhouse gas emissions.
- Provide a standing capability to meet the short-term needs of Federal agencies, Congress and the White House on issues relating to soil carbon sequestration and soil greenhouse gas emissions.
- Provide information to policy makers, the agricultural sector, energy and transportation industries, the scientific community and the general public.
- Participate in the transfer to and adoption of technology by other countries for quantifying and verifying carbon sequestration rates
 - Australia, Canada
 - Central and South America

Ongoing Research at K-State

Purpose

- To determine how plant and soil management affect:
 - Quantity of C is stored in soils
 - Rate of C storage
- Identify and quantify additional benefits
 - soil, water, economic
- Climate variability
 - CO₂, water, temperature

Ongoing Research at K-State

- Soil C cycling basic
 - Biological, physical, chemical
- Plant C inputs
 - Fire and grazing on grasslands
 - Crop rotations
 - Varieties and cultivars
- Soil management
 - Tillage
 - Manure
- Economic and energy analysis

Ongoing Research at K-State

- Monitoring and Verification
 - Greenhouse gases from soil
 - Issues related to soil sampling
 - Database
 - Remote Sensing
- Economic and Policy analysis
 - Private program
 - Government Program –Conservation programs

Outreach at K-State

- Regional Extension Specialist
 - Printed materials
 - Field days
 - Training modules
- National Specialist
 - Soil and land management
 - Economic and policy analysis
- Decision Support Tools
- National Workshops
 - Monitoring and Verification at K-State

- Team
 - Agronomy, Crop Science, Ecology, Economics, Remote Sensing, Soil Science

- Websites

www.oznet.ksu.edu/kccm

www.oznet.ksu.edu/ctec

www.casmgs.colostate.edu/

E-mail: cwrice@ksu.edu

Phone: 785-532-7217

HOUSE BILL No. 2145

By Committee on Higher Education

1-31

Proposed Amendment
For Consideration by Higher Education Committee
February 12, 2003

Adopted 17 Feb 03

Further Proposed Amendment
February 19, 2003

9 AN ACT concerning public postsecondary education; certain persons
10 deemed to be residents for purposes of tuition and other fees at post-
11 secondary educational institutions.
12

13 *Be it enacted by the Legislature of the State of Kansas:*

14 Section 1. (a) Notwithstanding any other provision of law, any indi-
15 vidual who is enrolled or has been accepted for admission at a postse-
16 condary educational institution as a postsecondary student shall be
17 deemed to be a resident of Kansas for the purpose of tuition and fees for
18 attendance at such postsecondary educational institution. The provisions
19 of this section shall not apply to any individual who has a valid student
20 visa.

21 (b) As used in this section,

22 (1) "postsecondary educational institution" has the meaning ascribed
23 thereto in K.S.A. 74-3201b and amendments thereto; and

24 (2) "individual" means a person (A) who has attended an accredited
25 Kansas high school, and who has either graduated from an accredited
26 Kansas high school or who has earned a general educational development
27 (GED) certificate issued within Kansas, (B) who has been a domiciliary
28 resident of Kansas for a period of three years or longer immediately pre-
29 ceeding the date the person enrolls at the postsecondary educational in-
30 stitution as a postsecondary student, regardless of whether the person is
is not a citizen of the United States of America.

for three or more years

Sec. 2. This act shall take effect and be in force from and after its
publication in the statute book.

(A)

(B)

House Higher Education Committee
Meeting Date: 2/19/03
Attachment No.: