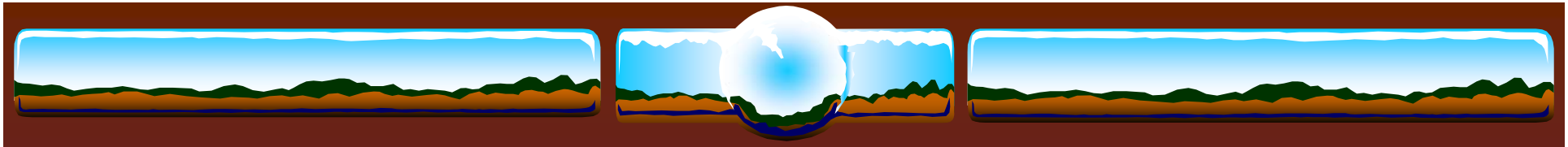

Organic Farmers: Opportunities, Realities and Barriers

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Department of Geography & Environmental Resources
Southern Illinois University- Carbondale

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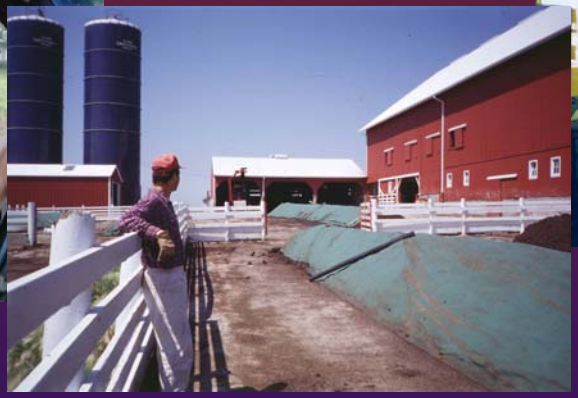

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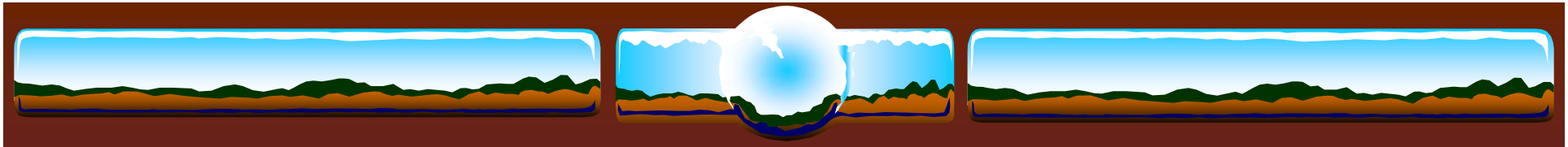


Presentation Outline

- Geography and Agriculture
- Research on Organic Agriculture
- Current Study
- Conclusions

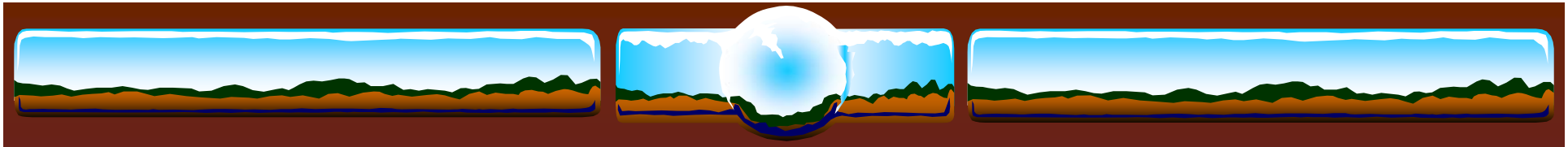
Geography

GEO : EARTH

GRAPHIEN : to DESCRIBE

maps, data,

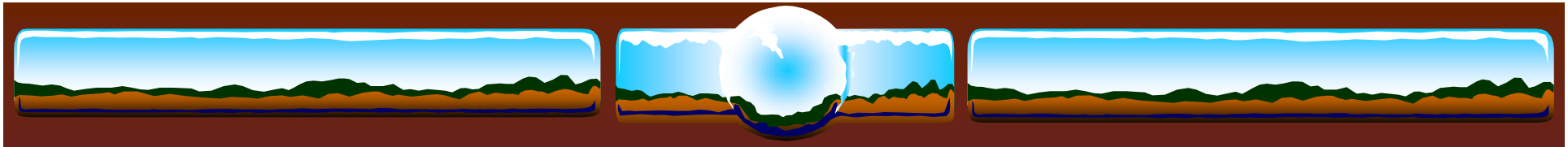
spatial analysis



Data on U.S. Organic Agriculture

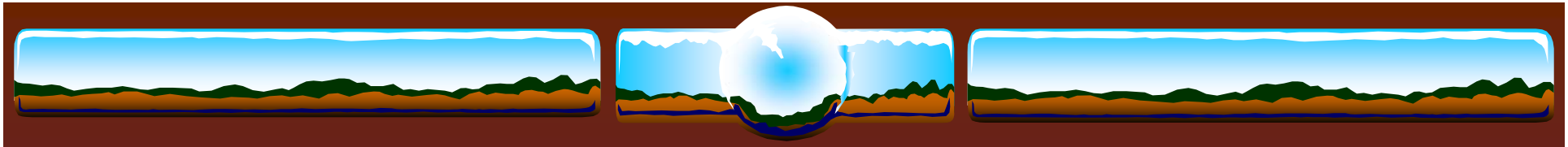
- Estimated 1-7% of farmers
  - Certified organic cropland doubled 1990s
  - Current
    - 2.34 million acres
  - Variations:
    - .1% of corn/soybeans
    - 2% of specialty crops (lettuce,carrots, apples, grapes)
    - 30% buckwheat, 37% spelt

USDA-ERS 2000, 2001,2003



Background Research

- Organic Production
  - Economics
  - Production
  - Landscapes
- Organic People
  - Farmers
  - Consumers
  - Local Food



Production Research

- Economic Comparisons
- Similar yield + Lower input cost + Price Premium = Profit

  Smolik and Dobbs 1991, Batte et al. 1993

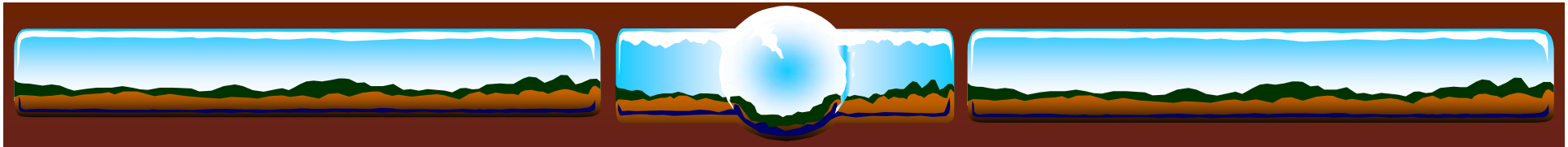
  - Organic highest net return 5 of 6 years

    Illinois Stewardship Alliance 2002

  - Similar pest losses, better tasting produce

    Apples in WA: Reganold et al. 2001;

    Tomatoes in CA: Letourneau & Goldstein 2001



Production Research

- Comparing Productivity is Complex:

  Test Plots, Field Experiments, On-Farm Variables?

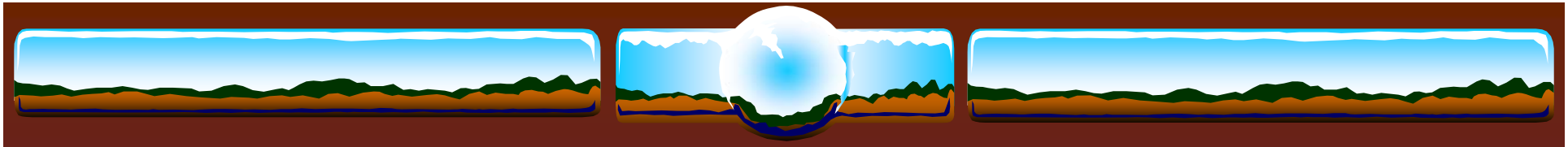
- Comparative Observations

  N=30 13 O>C, 2 =, 15 O<C (<20%)

- O> in variable growing conditions

  C> in favorable conditions

Pimentel et al., 2005, Mäder et al 2002, Clark et al. 1999,
Hanson et al. 1997, Stanhill 1990, Lockeretz et al., 1981



Production Research

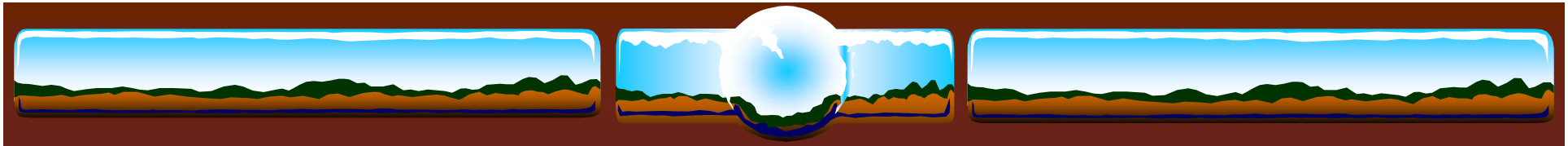
- Landscapes
  - Soil: quality, topsoil depth, structure

    Liebig and Doran 1998, Shepherd et al. 2002
  - Biodiversity: birds, insects

    Shutler et al. 2000, Blackburn & Arthur 2001
  - EU Policy for Rural Sustainability

    ecology, economy, social, cultural geography

    Agriculture Ecosystem & Environment 2000



Social Research

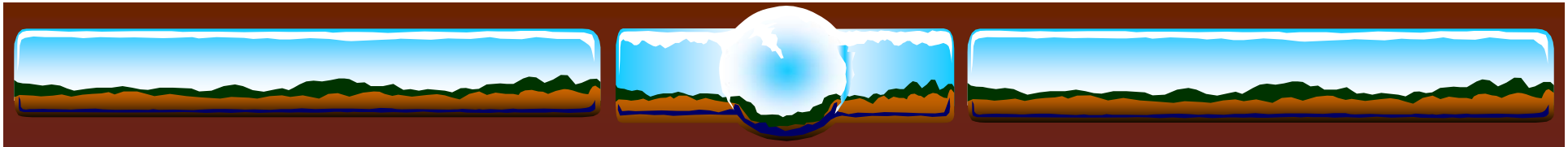
- Farmers
  - Worldview distinct

    ecological, alternative, independent

    Beus and Dunlap 1990, 1994, Duram 1997
  - Demographic trends

    variations, education, age, gender

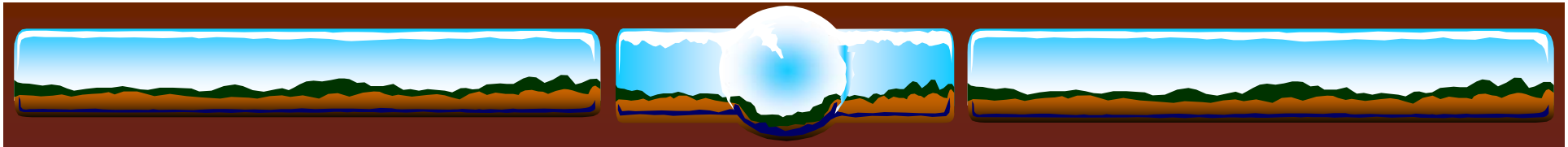
    Lockeretz 1995, Egri 1999, Duram 2000



Social Research

- Consumers
  - Market Growth
    - 20% annually
    - $9.3 billion
    - domestic & export
  - Consumer Demand
    - 52% prefer organic produce

Dunn 1995, U.S. Congress 1995, OTA 2001, ABC NEWS 2001



Social Research

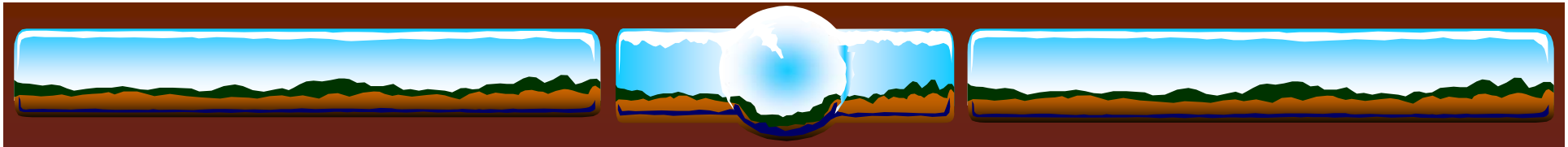
- Local Organic Food
  - Direct Marketing

    Farmers' Markets, CSAs

Norberg-Hodge 1995,

Kloppenburg et al. 1996, DeLind 1998,

Cone and Myhre 2000, Brown 2002,
USDA AMS 2002

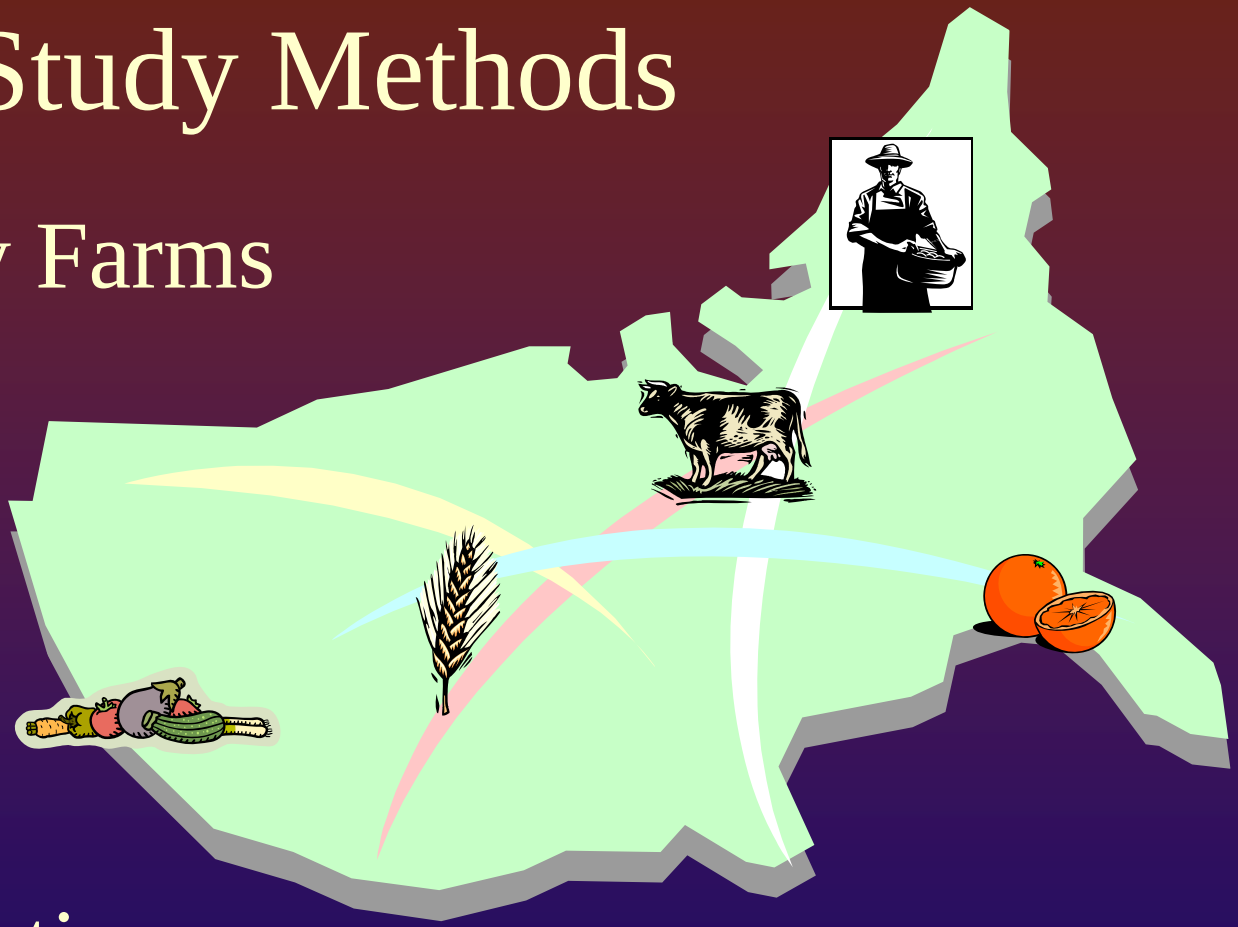


This Study:

What are the main opportunities and barriers for organic farmers?

Study Methods

- Case Study Farms
  - California
  - Colorado
  - Florida
  - Illinois
  - New York



- Data Collection
  - On-farm visits, telephone, email

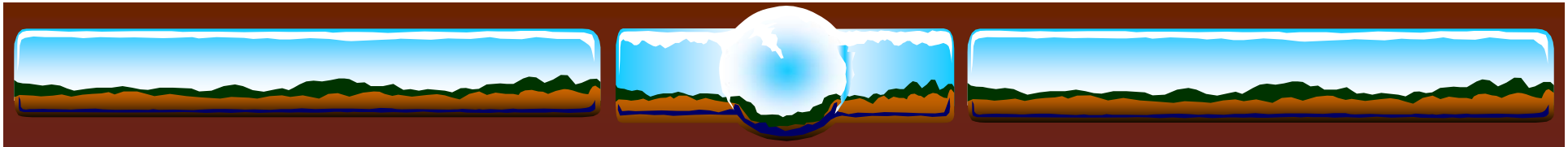
California:
Marketing Organic Vegetables

Colorado:
Home on the Plains

Florida:
Only the Best Citrus

Illinois:
Diversity Instead of Corn

New York:
CSA within an Ever-Changing Farm



Analysis

- Qualitative
  - Record, transcribe, code themes
  - Cross-case comparison
  - Discover generalizations

Agar 1980, Abbott 1992,
Miles & Huberman 1994, Duram 2000

- Quantitative
  - Univariate, available data

Characteristics of 5 Farms





	CA	CO	FL	IL	NY
Ecoregion	California Coastal Chaparral	West High Plains	Coastal Plain Forest	Prairie Parkland Temperate	Great Lakes mix Forest
Precipitation	14.7”	15.2”	49.8”	36.7”	35.9”
Soil Type Drainage	Clay loam Moderate	Loam Well	Fine sand Excessive	Silt loam Moderate	Silt loam Well
Jan./July Low/High	38-83°F	12-90°F	46-92°F	9-83°F	16-82°F

Characteristics of 5 Farms

	CA 	CO 	FL 	IL 	NY 
Acres	250	4,800	14	300	500
Year	1989	1977	1992	1994	1990
Labor	3 +30	3 +1	2 +3	2 +1	3 +15
Markets	Regional Own Distribution	National, & Intl Wholesale	National Distrib	Local FMkt & National Wholesale	Local CSA & Regional Wholesale
Crops	30 vegetables, nuts, fruits	wheat, buckwheat, millet,corn, alfalfa	11 citrus varieties	chicken, turkey, beef, soy, sorghum flax, millet,	25 vegetables sheep, soy, corn, barley, hay

Opportunities and Barriers: Organic Farmer Perceptions

Economics

Markets
- diversification
- direct marketing
- 'big organic'

Crops
- quality

Organic Opportunity

Ecology

Soil Health

Weather

Balance
- ecosystems

Society

American Culture
- conventional ag
- cheap food

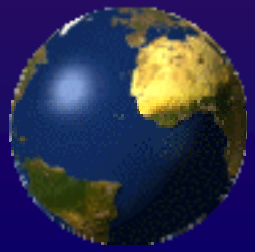
Government
- USDA standards
- certification
- research
- transition help

Personal

Independence
- information
- risk
- low debt

Innovation
- experiment

Tradition



Conclusions

- Opportunities -- Barriers
  - complex
  - overlapping
- Farmers Need Information, Research
  - informed choices
  - 3 year transition is risky
- *Good Growing: Why Organic Farming Works* (2005)