Missouri; Past, Present, and Future: Human-Environmental Interaction in the Cultural Landscape of Missouri

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Our Decisions
(from the perspective of this Human Geographer)

• We have the power to decide the future of Missouri’s Natural Resources
  – Exert that power strategically, intentionally,
  – OR let the trends go as they go
• “Not to decide is to decide.” -Harvey Cox
Our Decisions

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The Situation

Our contemporary Human Condition

Population
  Increase
Urban
Coastal

Economic Disparities
Global differences
Widening gap between wealthy and poor
Costs of living/health rising
Impacts:

• Water Systems
  – Quantity/Quality; life. . .

• The Land
  – Forest to Forage; human settlement; agricultural systems (GMO or organic?). . .

• Biomes
  – Species at risk; plastic. . .

• The Atmosphere
  – Energy use (fossil fuels? carbon?); climate change. . .
Three Assumptions I make, as a Geographer:

1. Humans modify the physical landscape
2. Human culture determines what is a natural resource
3. There are many possible variations for natural resources
1. Modifying the Physical Landscape

• The ecological systems we now have are products of thousands of years of Human-Environmental Interaction
• Humans modify the “natural”
  – No idyllic past
  – Societies modified their landscapes
  – Degrees of modification
  – All places are modified by human culture
  – Cultural Landscape

• Which creates
  – SENSE OF PLACE
  – and momentum
2. Culture Determines Resources

• Specific, particular societies choose what is a resource, subject to changes in:
  – Perceptions
  – Values
  – Needs
  – Availabilities
  – Technology
  – Etc.
3. Many Variations in Resources

• Some resources are:
  – Finite
  – Renewable
    • but can be depleted
    • Or less at risk of depletion
  – Keystone - significantly effect whole system
  – Yet to be “discovered”
  – Forgotten, neglected, deemed not worthy
We “Follow” the Resource

- Resources defined for food, shelter, and tools
  - Water, Soil
  - Plants and Animals
  - Metals and Minerals

- Location
  - Site (physical attributes)
  - Situation (access and mobility)

- Subject to changes
  - Climate, Soil, Plants/Animals
  - Human Intervention
It’s A Complex World After All
Our Recent Missouri Sense of Place and Momentum - Choosing which Plants, Animals, Minerals...
Native Americans, e.g.

- Propensity to populate and manipulate:
- Clovis species depletion
- Cahokia urban environment
- Semi-nomadic gathering and hunting; sedentary agriculture
- Relocation Diffusion
But early was mostly HARVESTING Flora, Fauna, Minerals/Metals

- Gathering vegetation
- Hunting animals
- with limited Trade

Osage People
Then, Agriculture

- Selective Domestication
- Intensity of Production
- And the Arrival of Europeans
A New Age Began for Missouri (in scale, density, & distribution)

- Fur Trade
- Shifting balance of prairie and woodlands
- Cultivation
- Manipulation of water and soil
- Mining
Europeans In Missouri

• Regional Variation
  – River Lowlands
  – Prairie Plains and Hills
  – Upland Woodlands

• Ethnic variation
  – French trap, trade, mine
  – Scots-Irish diversity in subsistence
  – Native removal
  – German agriculture and industry, urban and rural
  – African slavery
  – 20th Century diversity

• Interlocking themes of economics, politics, religion, etc. create sense of place and change the cultural landscape
History of Trade Networks

- Rivers and Trails
MORE – the experience of Abundance

- Water
- Soil
- Temperate, Moist
- Vegetation and Wildlife
- Access and Mobility
- Dispersed Human Population
20th Century Diversity

• Primary Sector
  — Agriculture
  — Mining
• Secondary Sector
  — Processing
  — Manufacturing
• Tertiary, Quaternary, Quinary
Resulting in Dramatic Reconstruction

• In only 300 years
• The Ecosystems modified:
  — Scale
  — Depletion
• Consumption
• Infrastructure
• Occupation/Settlement
Our Context: the strength of Missouri Diversity

- In the Middle
  - East, West, North, and South
- Exaggerated by human migration
- Balance?
  - Resource independence?
- Once was... then became...
Our Foundations

- Productive Soil
- Water Sufficiency
- Moderate Climate
- Biological Diversity
Had to Learn Conservation. . .

- Crisis and Necessity
  - Depletion
  - Flood
  - Erosion
  - Fire

- Ecosystems
  - Protection
  - Pro-action
  - Mixed Use
However, the historic Stresses:

- Human Migration and Population Growth
- Wars
- Economic Shifts
- Political Swings

*Death of Lyons at Wilson’s Creek*
Population change over 20th Century
(3,106,665 to 5,595,211)

- Missouri percent of change lower than country
  - Low in depression years, high in peak baby boom years
- Lowest decade 1980s
- Decline in most northern agricultural areas
- Movement away from city centers to outlying areas
- Lake area growth
Consequent

Population Density and Distribution

MISSOURI - 2010 Census Results
Total Population by County
**Hispanic Population in Missouri County-by-County Percentage**

**RACE**

<table>
<thead>
<tr>
<th>Year</th>
<th>White</th>
<th>Black</th>
<th>Asian</th>
<th>Other*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>82.8%</td>
<td>11.6%</td>
<td>1.6%</td>
<td>4%</td>
</tr>
<tr>
<td>2000</td>
<td>84.9%</td>
<td>11.2%</td>
<td>1.1%</td>
<td>3%</td>
</tr>
</tbody>
</table>

*Includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, some other race and two or more races. (Some totals may not equal 100 because of rounding.)

**SEX AND AGE**

**TOTAL POPULATION**

- 2000: 5,595,211
- 2010: 5,988,927

**Legend**

- **0.5% - 1.4%**
- **1.4% - 3.1%**
- **3.1% - 6.3%**
- **6.3% - 11.2%**
- **11.2% - 18.6%**

Source: 2010 U.S. Census Bureau
Author: Jacob McCleland
Percent of Population Age 65 and Over by County, 2010

Percent
- 7.2 - 12.5
- 12.6 - 15.8
- 15.9 - 18.7
- 18.8 - 22.4
- 22.5 - 29.6

Missouri = 14.0%

Data Source: U.S. Census Bureau, Decennial Census DP-1, 2010
Map Prepared By: University of Missouri Extension, Office of Social and Economic Data Analysis (OSEDAT)
Map Generated On: 19 May 2011
General Population Trends:

• Slowing overall growth
• Moving south
• Moving to urbanized areas
  – Center cities decline, while surrounding counties increase
• Aging population in southerly retirement areas
• More ethnic diversity
e.g. Retirement Residency

- The population pyramid
  - Baby Boomers retiring
- Decline in agriculture; increase in ‘burbs
- Migration
  - Lakes - 3 regions
  - Southern tier, central lakes, southeast
- Outdoors as Nostalgia
Urban or Rural or Exurban?

- Values and Attitudes
- Relationships
- Sustainability and Linkages
- Fear the Outdoors = “safe” outdoors?
- Appreciate the Outdoors = islands?
Where are the areas of greatest concern? Values? Where are most vulnerable areas? Are they the same?
Where is the Economy?

Short Term or Long Term Profits and Losses?
Will there need to be a Narrowing of Perspectives?

- Mobility
- Consumption
- Urban Advantages
- Networks
- Outdoor Recreation
- Healthy Natural Environment
- Open Space

At Odds?
Compromise?
The Emerging Systems

• Biological Diversity
  – Which do we end?
• Pollution
  – What health issues?
• Energy
  – At what environmental cost?
• Water
  – Quality and Quantity?
• Urban Systems
  – New ecologies?
The Decisions:
What do we do Where?

• Energy Consumption
  – Appropriate Sources
  – Transportation

• Ecological Zones
  – Preservation or Adaptation
  – Regional Integrity

• Urban Growth
  – Up and/or Out

• Type of Agriculture
  – Food, Fuel, Fiber, Feed

• **Sustainability**
  – interconnections
No one arena can dominate the others, and have sustainability.
What Kind of Culture?

- Consumption?
- Regional Integrity?
- Fairness?
- What Time Left?

30 years?
Today we decide what kind of Missouri we want!