

Geography 488:01 Urban Geography Field Seminar Spring 2008

The Urbanization of the Crow River's Watershed:  
The transition from a Landscape of Production to a Landscape of Consumption

In this seminar we will begin the analysis of the urbanization and economic development of a rather large watershed that flows across the moraines and glacial till plains of Central Minnesota from its headwaters in the lake and hill region with a sparse agricultural population through the western edge of the Twin Cities Metropolitan Area to where it joins the Mississippi northwest of Minneapolis, at Rogers. We will try to examine both the landscape change with the techniques of the so called "Landscape School" of geography as well as engage in applied urban geography. We will also try to theorize the change occurring on the margins of the metro area. Work on suburban and ex-urban development is limited in geography so we will spend some time searching for a theoretical structure for our observations.

This term we have generous financial support for our work in the form of Pedicles Grant for civic engagement and support from the Three Rivers Center at Macalester College, a project supported by the Mellon Foundation. We are going to coordinate our work with two other geography classes, Advanced GIS and Cities of the 21<sup>st</sup> Century. This is the first time we have tried to team up classes. It should be great fun, and enable us make a significant contribution to the local literature.

For this class we assume the structure of a consulting firm that has a contract to produce a report for a policy implementing organization. We do not have client for this work but we several agencies and people have expressed interest in the atlas we will produce. The Advanced GIS class will make most of the maps but you are encouraged to make some of your own. Birgit Muehlenhaus will be responsible for the design and production of the Atlas

The class product will be an atlas of the watershed that will include both maps and narratives that describe and analyze the processes we believe are making significant contributions to the process that is changing the human geography of watershed. The backdrop of our work is the need to preserve to the greatest degree possible the quality of the water in the state. A portion of the river has been declared a recreational river and is therefore afford a certain level of protection. However the protection is largely confined to a strip of land along the primary stem of the North Fork of the river.

Your assignment is to select a problem or topic from the appended list or develop one of your own to research and reach a conclusion about. You will then prepare your report for inclusion in the atlas AND for presentation at the Midwest Undergraduate Research Conference at Gustavus Adolphus College April 26<sup>th</sup>. That presentation will take the role

of a final exam. Members of the class are free to work as individuals or as members of teams. We will combine all the work into a publication at the end of the term. I expect it will be similar to the ones produced by previous seminars.

Our meetings on Wednesday evenings will normally not last longer than two hours because the vast amount of the work for this class will occur outside of class. The class times will be devoted to a discussion of your research progress.

You will also spend considerable time in the field and in research centers in the region. Field research logistics will be an important feature of the class. I expect you to work on your own or with your teams to the greatest degree possible. However we will make some reconnaissance trips as a class. We will also organize research days during which a van will drop individuals and teams at research locations and collect them later. We will also have to work around the winter weather. We have travel budget for the class so teams will be able hire the college vans for their work. Individuals will get reimbursed for gas used in their cars.

We have contacted several people working in the area and some of them have responded with ideas for research and offers to visit with you as your research progresses.

I am looking forward to this project with gusto! It will be fun, interesting, challenging and continue the departments reputation for meaningful applied research. I expect your work in this seminar will be the capstone of your Macalester geography career.

Because we are producing an atlas Birgit Muehlenhaus will provide cartographic guidance and support for the project. She has begun to gather important blocks of data and prepare some maps.

N. B. We do not have much time so please start to read the assigned material and think about your subject before our first class.

REQUIRED TEXT:

Dolores Hayden *Building Suburbia: Green Fields and Urban Growth, 1820-2000*. Vintage books 2004

Other required readings will be on reserve in the library.

Each of you should take on the responsibility of leading the seminar discussion of the readings. **Be prepared to volunteer for a reading on Jan 30<sup>th</sup>.**

**Jan 30**

Introduction to each other and the project. *Be prepared to discuss a suburb you know well.*

Review of fall semester's maps. - Birgit

Overview of research area via Google earth -

DNR maps other web resources

Review of *The Urbanization of The St Croix River Basin: An Annotated Atlas*

**FEB 2** Ground Hog Day Tour of the watershed 9:00- 3:30

**Feb 6**

7:00 Discussion of landscape types in study area  
Discussion of potential research topics.

8:00 Discussion of assigned readings on Landscape School of Geography

Carl Sauer "Morphology of Landscape" This classic essay is the base of the landscape school. In it Sauer lays out the turn away from the physical geography base of the discipline. He sets out the questions geographers should ask. Clearly much work has been done since this piece was published but it is the foundation of our work.

J F Hart "Understanding Landscape" This a modern restatement of Sauer presented in a more accessible style with good examples. It is a guide on what to look fore in the landscape.

C. W. Olmstead "Changing Technology, Values and Rural Landscapes"  
This is a great example from Southern Wisconsin of what we are going to do in the St Croix Watershed. I expect we will develop an outline very similar to this but with more themes with in the most recent time period.

Schwartz & Theil "maps of glacial advances and melting. This is the base for our understanding of the physical landscape

**Feb 7** Movie night. We will watch a movie on suburbanization with the Advanced GIS and Cities of the 21<sup>st</sup> Century Classes. Popcorn will be served. C107 at 6:30 PM

**FEB 9 Back up date for tour**

**Feb 13**

7:00 Discussion of readings

Hayden's *Building Suburbia*

Bjelland, M. D., M. Maley, L. Cowger, L. Barajas. "The quest for authentic place: The production of suburban alternatives in Minnesota's St. Croix Valley". *Urban Geography* 27(3): 2006, pp. 253-270.

J F Hart Selections from the *Rural Landscape*

Part five Small towns and the Urban Edge pp299-

The Impact of Leisure pp350-369

The changing country side 371-382

This reading is discussion of general patterns that will impact our study area

WPA Guide for Minnesota

This tour guides provide us a view of the transport corridors and towns in the 1930s

9:00 Discussion and selection of research topics.

Individuals and teams will establish tentative research agenda and conduct preliminary research on its feasibility – Schedule meetings with informants  
Use vans to do follow up observation

**Feb 20** each individual/group will reports to the group the feasibility of the research topic selected

These reports will include

- a. theoretical base
- b. methodology
- c. Preliminary report on availability of resources.
- d. List of atlas maps needed for presentation and analysis of topic

Class will discuss and make suggestions on topic and research plan

**Feb 27** Lanegran in Washington for NGS, use the time as you need.

**March 5**

Discussion of maps of area made by advanced cartography class

**March 12**

Mid- term reports on individual and team projects 1st *draft of maps needed for atlas to be ready*

**March 19 Spring Break** spend it on the banks of the Crow

**March 26** reports on work done over spring break and work sessions

**April 2**

Work session

*April 3 field session?*

*April 7 Field sessions?*

**April 9 work session** Final title photos and art needed for atlas.  
First draft of paper and atlas narrative

**April 16** Lanegran in Boston for AAG  
Research teams meet on own schedule

*April 20<sup>th</sup> Canoe trip down the North Fork of the Crow. This will depend on water and weather conditions that Sunday*

**April 23** final reports on research project due  
Final draft of atlas material due  
Practice presentations for Midwest Undergraduate Geography  
Research Conference  
Production of atlas begins

**April 26** Midwest Undergraduate Geography Research Conference at Gustavus  
Adolphus College, St Peter Minnesota

**April 30** .  
Review progress and final draft of atlas

## Research Topics

Our general questions are

1. The several parts of the Crow River system are classified as endangered and in need of a plan for the Total Maximum Daily Load of pollutants. ( see attached map) What are the sources of the pollution and what sort of plans have been or can be developed to stabilize or improve the water quality?
2. How and why is the population density changing in the Watershed?
3. How with urbanization and development of the watershed impact the quality of water in the Crow River and Elm Creek?

More specific causal themes include but are not limited to:

1. Types of urban growth
  1. freestanding towns and their expansion
    - i. Changes in form of freestanding towns
      1. role of main street
      2. development of service landscape
      3. new strip at edge of town or nearby freeway intersection
    - ii. development of specializations
    - iii. new subdivisions

2. The zone contiguous expansion of West Metro Areas, forms and processes
  - i. types, location and scale of developments
  - ii. new urbanism
  - iii. engulfing of formerly freestanding towns
  - iv. planning for expansion local and regional
3. Corridors of development – new crossroads.
4. the long distance commuter zone focused on amenities and/ or cheap housing
  - i. The conversion of season homes to permanent residences
  - ii. patterns of pre-built or “mobile home” development
5. New Urbanism
2. Changes in agricultural landscape
  1. Distribution of farms and farm types.
  2. changing farm economy
    - i. part time and part owner farmers
    - ii. changes in crop and livestock patterns
    - iii. impact of ethanol
    - iv. impact of turkey farms
  3. potential changes in environmental impact of changes in agriculture
3. Industrial development
  1. Location and growth of industrial parks
  2. Growth of industrial employment
4. Changes in transportation system
  1. potential freeway development
5. Development of recreation landscape
  1. changing pattern of seasonal homes
  2. development of waterfront property
    - i. Crow River bank development
    - ii. lake shore property
    - iii. developments on tributaries
    - iv. nature of public lands and zoning on shorelines
  3. ownership of land for hunting
  4. changes in resorts location and function
    - i. Establishment of cross-country ski and snowmobile trails.
    - ii. camps private and non-profit
  5. Pattern in hospitality industry
    - i. motels
    - ii. restaurants
    - iii. growth of service industry focused on non-residents
  6. pattern of parks and public land
    - i. location features and history of parks and other public land
      1. river orientation
      2. county and state forest
    - ii. pressure on public land
    - iii. efforts to create park land

- iv. Role of national parks service and corps of engineers.
- 7. New Political response to urbanization and development
  - i. joint powers agreements among counties
  - ii. incorporations
  - iii. Land Trusts,
  - iv. Watershed associations
  - v. Lakeshore property owners associations.

We also need to think about the organization of our sub regions.

We can focus on political units, such as counties because they have the planning power or we can focus on tributary valleys

The counties are

Carver  
Hennepin  
Kandiyohi  
McLeod  
Meeker  
Pope  
Renville  
Sibley  
Stearns  
Wright