FARMLAND PROTECTION IN AUBURN, MAINE: HOW EFFECTIVE HAS IT BEEN?

Proposal For A Study--University of Maine System
Geography Field Camp
1984

Problem: During the past three and a half decades, the State of Maine has lost about two-thirds of its farmland. Although much of it has returned to forest as the economic stress on agriculture takes its toll, since 1960 nearly 30% of the open farmland lost has been to development. The need to protect this resource is based on the necessity of (1) preventing good quality farmland from being paved over and thus removed from food production, and (2) maintaining a sufficient number of farms to support the agriculture inferstructure that would be difficult to rebuild once destroyed. Many governments (state, county and municipal) throughout the United States have passed laws to protect farmland from development. The City of Auburn, Maine passed such an ordinance in the early 1960's. This Auburn legislation is one of the strongest farmland protection acts in New England and is often cited as a regional example of how to deal with development pressure in agricultural areas. Current local interest in changing the Auburn law to permit more development in agricultural areas and the possibility of a statewide plan to protect farmland make a study of the effectiveness of this local ordinance timely. This study is an effort to document the effectiveness of the Auburn farmland protection law.

The effectiveness of the ordinance will be studied in terms of historic patterns and present use. The course will contribute to a better understanding of the dynamics of land use in the following ways.

I. Historical Overview of Auburn's Agricultural Zone from 1960's to Present

A. Land Use Change

1. change in number and type of farms

2. change in farmland acreage

3. relationship between agricultural and non-agricultural land uses

4. uses that agricultural land has been converted to

5. relationship between land quality and use changes

B. Ownership Pattern Change

1. land transfers and parcel size

2. ownership (farmer/non-farmer, resident/non-resident)

C. Management

1. conservation practices (type and extent)

2. investment in production activities (cropping, seeding, etc.)

3. erosion patterns

4. relation of ownership to management (leased land, owner operated, etc.)

II. Current Contribution of Agriculture Produce to Auburn

A. Determine Value and Type of Products Produced in Auburn

1. crop products

2. livestock products

B. Determine Value and Type of Products Sold on Local Market

1. crop products

2. livestock products

III. Foundation to Monitor Future Trends

A. Land Use Information

1. coded for inclusion in data file

2. provide baseline for ongoing City of Auburn-University of Maine, Farmington geography program computer project

Methodology: The field course methodology will involve a detailed inventory of changes in Auburn's agricultural zone and adjacent area during the past 25 years. Basic land use ownership and management information will be obtained from past and current census reports, air photos, property tax files, Soil Conservation Services files and questionnaire surveys. This represents the type of activity needed to establish a comprehensive data base to determine the effectiveness of the farmland protection ordinance. Patterns in the zone will be compared to those in adjacent non-zone areas. Information will be graphed and mapped to represent changes through time. A series of statistical tests will be used to compare patterns inside and outside the agricultural zone. Each student enrolled in the course will develop a research report. The faculty will write a summary of the research finding.

Course Structure: This study will be organized within the framework of a field camp that will involve faculty and students from several campuses. University of Maine System faculty will include Joni Seager-UMO, Robert French-USM, Frank Hodges-USM, and Paul Frederic (Director)-UMF. In addition, Professor Robert Chute-Bates College, will conduct a parallel short course. This arrangement will permit the faculty and students from the University of Maine and Bates to interact in a problem-solving environment without becoming entangled in the problems of cross-registration.

Students enrolled in the course will gain knowledge and acquire skills needed to solve field problems. Emphasis is on actual field experience that involves development of research statements, field data collection and analysis and integration of material in a report. Each student is to develop and submit a research paper dealing with a selected aspect of the field problem. The course carries three academic credits.

Time Table:

May	21	Orientation and Air Photo Technique
	22	Urban-Rural Interfaces (Processes at Work)
	23	Field Work and Data Collection
	24	" " " " "
	25	" " " " "
	26	" " " " "
	27	Sunday
	28	Memorial Day
	29	Field Work and Data Collection
	30	Data Analysis
	31	" "
June	1	Summary and Presentations
	8	Research Paper Due

Expected Enrollment:

12-18 University of Maine System
5-10 Bates College (parallel program)

FACULTY	PROFESSIONAL INTERESTS
Joni Seager, UMO Assistant Professor	Historical Geography, Agricultural Geography, and Cultural Geography
Robert French, USM Associate Professor	Field Methods, Cultural Geography, and Historical Geography
Frank Hodges, USM Associate Professor	Economic Geography, Urban Geography, Cargography
Paul Frederic, UMF Associate Professor	Rural Geography, Planning, and Historical Geography
Robert Chute, Bates Professor (parallel program)	Biology, Lake and Coastal Zones, and Environmental Studies

Budget:

University of Maine Faculty Stipend		
1 full time	$1,310	
3 part time	900	$2,210
Transportation		
Faculty (course planning and implementation)	$ 300	
University vehicles to transport students (use in Auburn area)	200	$ 500
Materials		
Lewiston-Auburn DIME file	$ 75	
Air photos	20	
Drafting materials	20	
Photocopying	35	
Phone and Postage	25	$ 175
		$2,885

Source of Funding	
University of Maine-Farmington	$1,310
Student transport fees	90
Maine Department of Agriculture	400
Maine State Planning Office	400
University of Maine Chancellor's Office	685
	$2,885

Additional Support
- Work space and staff time
  - City of Auburn Planning Office
  - Androscoggin Valley Council of Governments
  - Bates College

Students will cover cost of their housing and meals.