CREATING RECREATION PARTNERSHIPS ON PRIVATE AGRICULTURAL AND FOREST LAND IN THE URBAN NORTHEAST: A CASE STUDY FROM THE GREAT MEADOWS OF THE CONNECTICUT RIVER

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Abstract: This paper explores the premise that privately owned open space is vital for meeting future recreation demands in the urban Northeast. A case study in the Great Meadows of the Connecticut River in the Hartford, Connecticut metropolitan area is used to illustrate the challenges in promoting recreational access and open space preservation in a privately-owned held farming and riparian forest landscape. This case study includes a survey of local landowners about allowing recreation on their land. The conclusion of this paper reports on the discussion generated by the presentation of this paper at an NERR roundtable session.

### Introduction

The Northeastern United States is becoming increasingly urbanized. In fact, this increase in developed land area has far outpaced regional population gains, causing a precipitous loss in farmland in the region (USDA Agricultural Census, 1997). This urban sprawl development has also taken its toll on the recreation opportunities previously afforded by nearby natural areas. At the same time, recreation demands have increased on remaining public facilities.

In many traditional rural landscapes in the Northeast, recreation opportunities such as hunting, fishing and hiking were provided by informal arrangements with private farm and forest land owners. For example, in Massachusetts many of the regional trails including the Metacomet-Monadnock trail are primarily located on private land. Unfortunately, as increased residential development divides large forest and farms into smaller home-sites, these informal recreation agreements are no longer honored. While purchasing land for public recreation use is one solution to this dilemma, the fact remains that funding for these purchases is increasingly limited and unable to keep up with the demand for open space preservation in urbanizing areas.

The premise of this paper is that privately owned open space land will become increasingly important for meeting

future recreation demands in the Northeast. Recreation planning will require innovative strategies for promoting open space preservation and recreation access to private agricultural and forest lands. This paper will focus on generating ideas for developing the public-private partnerships that are necessary for recreation collaboratives to work. In particular, participants at an NERR roundtable discussion were asked to bring their own experiences and ideas to address the following questions:

- What role, if any, does recreation development play in preserving working farms and forests in the urban Northeast?
- What cooperative agreements among private landowners might foster public access and recreation development?
- What organizational structure appears most beneficial for recreation partnerships?
- What is the role of the recreation manager or planner in developing recreation partnerships on private land?

In order to further the dialogue about these issues, a case study will be presented of the Great Meadows of the Connecticut River, a unique natural and cultural resource in the heart of the Hartford, Connecticut metropolitan area. According to planner, William H. Whyte (1968) in his book Last Landscape, "The most beautiful expanse of open space in New England is the Glastonbury Meadows, a natural expanse of park-like pasture land bordering the Connecticut River, complete with white steeples in the Here, only six miles from downtown background. Hartford, is the epitome of what the New England landscape should look like." Unfortunately, the Meadows continue to be threatened by encroaching development and conversion of farming to more incompatible uses. This case study describes an effort to promote recreational access and open space preservation in this privately-owned farming and riparian forest landscape.

#### **Great Meadows Case Study**

### Introduction

The research for this case study is based on two projects conducted by graduate students in the Department of Landscape Architecture and Regional Planning under the direction of Professor Robert Ryan. Initially, seven students conducted an inventory and analysis for The Great Meadows Study. This report was initiated and funded by the Great Meadows Conservation Trust, a local land trust devoted to protection of the Great Meadows. The study provided an overview of the resources and existing land uses, and included some recommendations for future management and protection of the Meadows. Following the Great Meadow Study, masters student Juliet Hansel conducted an independent survey of local farmers to understand attitudes about land use and protection in the Great Meadows as part of her masters thesis, Understanding Farmer Attitudes about Farmland Preservation in the Urban Fringe (Hansel, 2001). Some of the preliminary results of this thesis are presented here.

The Great Meadows are located on the banks of the Connecticut River within the towns of Glastonbury. Wethersfield, and Rocky Hill just south of Hartford (Figure Within easy commuting distance to the heart of 1) Hartford, these towns are examples of communities on the urban fringe. As some of the oldest towns in Connecticut and because of their location within the fertile Connecticut River Valley, they also have a strong agricultural heritage. Development in these areas creates conflict over the remaining open spaces, such as the Great Meadows. Decline of farmland, growing demand for recreational land, and the scenic and cultural value of open spaces are concerns held by many members of the Great Meadows Conservation Trust as well as other community members. One of continuing struggles for these communities is to

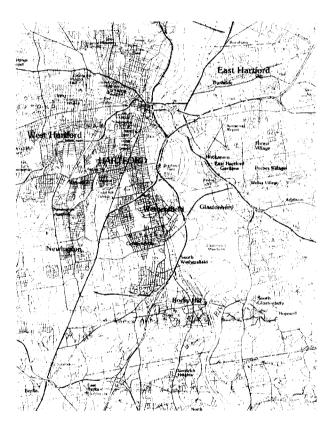


Figure 1. Greater Hartford Metropolitan Region Source: U.S. Geological Survey, 1994

In this rapidly urbanizing area the future of farming is a major concern. Statewide, Connecticut is losing 8,000 acres (approximately 80 farms) a year. Regionally, the Hartford area continues to grow and the surrounding towns continue to develop into traditionally farming areas. Locally, these three towns have witnessed fewer farms as older farmers sell to developers and new and younger farmers move elsewhere or do not continue to farm. There are few protective measures in these three towns to promote farmland preservation and enrollment in state and federal farmland protection programs is low, as well. The economic viability of farming is closely linked to the

determine how to balance a variety of community needs while still protecting the valuable natural resources of the Meadows.

The Great Meadows consist of approximately 4,000 acres of floodplain and represent some of the largest tidal wetlands in Connecticut (Figure 2). The Meadows are comprised of three main types of habitat – floodplain meadows, wetlands, and wooded riparian zones. The majority of the land is in private ownership and approximately 40% is farmland, which is the dominant land use; approximately 1600 acres are farmed by 25 local farmers. Thirteen-hundred acres are tilled for a variety of vegetable crops and 300 acres are used for pasture or hay.

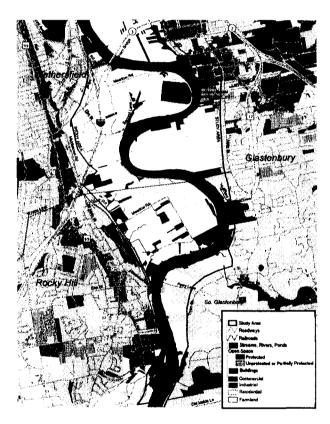


Figure 2. Great Meadows of the Connecticut River Source: Great Meadows Study, 2001

availability of farmland and therefore closely tied to management and protection of the Meadows, which as a whole represents one of the last large open spaces and viable farmland in the area.

Public access to the Meadows overall is limited by physical barriers, such as Interstate 91, and there are few public entry points (Figure 3). Periodic flooding also inhibits access to many areas. However, despite these restrictions and the fact that much of the land in the Meadows is privately owned, a variety of low-impact recreational activities occur with the permission of the landowners. The

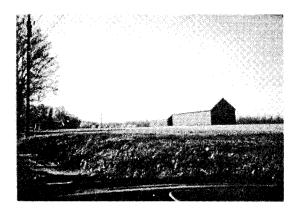




Figure 3. Farmland and Public Access Area in the Great Meadows

types of activities that occur in the Meadows include hunting, fishing, and birdwatching on private property. Local sporting clubs have arrangements with property owners that allow them to hunt and fish on private land. Hiking, biking, and horseback riding occur on the existing public roads and in a few small parks on the periphery. In addition, there are a few public boat launches for canoes and small powerboats.

Suggestions to increase public access to the Meadows for recreation have met with resistance from local farmers, other landowners, sporting club members, as well as members of the Great Meadows Conservation Trust. They express concerns that increasing access will not only interfere with existing farming activities, but will also pose safety concerns for hunting, and could be detrimental to the wildlife habitat and natural ecosystems of the Meadows. At present the informal arrangements that exist between landowners and users in the Great Meadows are considered to be preferable to formalized trail networks, which have been proposed in the town master plans. However, with growing residential populations and declining open land these communities are recognizing an increased public demand for protected open spaces and recreational opportunities. Such demands may include more trails for biking and hiking, expanded access for motorized vehicles, recreational fields, public facilities, and boat launches.

## Landowner Study

The recent University of Massachusetts studies of the Meadows considered the impacts of existing uses as well as how future trends may influence the recreation uses of this area. The research conducted by graduate student Juliet Hansel included a survey of farmers in the Meadows. The main objectives of the survey research were to understand farmer attitudes about land protection, research current practices, and determine farmers' willingness to collaborate with other community groups. The survey tool was a written self-administered questionnaire. In addition, the research was supplemented by some site visits and phone interviews with farmers. With a total of 24 eligible farmers, the response rate was approximately 75%. Of

those responding, 50% were part-time farmers. Most managed their farm by themselves or with assistance from other family members. Of the respondents, 44% were between the ages of 30 and 49, 33% were 50 to 69 years old, and 22% were over 70.

#### Survey Results

Although the survey included questions about a variety of issues relating to farm viability and farmland protection, the information on farmer attitudes about recreational activities and access to private farmland were the most useful for the topic of this workshop. The survey asked respondents to provide information about their attitudes toward public use and access of the Meadows as a whole as well as for their own policies about recreational activities and access on their private farmland. The survey questions were a combination of scaled responses, open-ended questions, and multiple response options. Using a 5-point Likert scale, respondents were asked to indicate to what extent they agreed or disagreed with a series of statements. Respondents as a whole tended to strongly agree that increasing access to the Meadows would threaten farming practices (Table 1). They were more neutral on whether existing recreational uses of the Meadows would interfere with their ability to farm effectively.

A comparison of the types of activities allowed on Meadows farmland with landowners' permission revealed that farmers appear to approve of activities which can occur on existing roads such as hiking and biking, and were less willing to allow access for skiing and horseback riding (Table 2). Written comments and interviews did not reveal why this distinction, but one explanation may be that the nature of skiing and riding allow for coverage of greater distances than hiking and can occur on more diverse terrain than biking and therefore may pose a greater threat to crops. These differences may explain reluctance on the part of farmers to allow activities that may encourage deeper penetration to untracked portions of their land. On the other hand, a high degree of willingness to permit hunting and fishing can be explained by existing partnerships between local sporting clubs and farmers.

Table 1. Farmers' Attitudes about Recreation and Public Access on Private Farmland

Survey Statement	Meana	$SD^b$
Increasing public access to the Meadows would threaten current farming practices.	4.61	.85
Hunting and fishing activities have interfered with your ability to farm effectively in the Great Meadows.	1.67	.85 .77
Other recreational activities have interfered with your ability to farm effectively in the Meadows.	2.83	1.20

<sup>a</sup>Scale: 1=strongly disagree, 2 = somewhat disagree, 3= neutral, 4 = somewhat agree, 5=strongly agree

<sup>b</sup>SD: Standard Deviation

Table 2. Recreation Activities Allowed on Private Farmland

Activity*	Number Permitting	Percentage of Total
Hunting and Fishing	14	77.8%
Hiking	11	61.1%
Biking	10	55.6%
Skiing and Horseback Riding	9	50.0%
Motorized Vehicles	3	16.7%
Number of Recreational Activities A	llowed	
None	3	16.7%
1 to 2	5	27.8%
3 to 4	3	16.7%
5 or more	7	38.9%

<sup>\*</sup>Activities listed represent only the most popular uses permitted in the study area.

Survey results regarding who could access private farmland suggested that there might be a tendency to allow access by groups with whom landowners have a personal relationship and less willing to allow those with whom no such bond exists (Table 3). Family, friends and other farmers rated high on the list. Local fish and game clubs were allowed by many farmers (again due to existing agreements), and local residents were allowed by less than half. People who are unfamiliar to the survey respondents, such as members of other clubs and tourists were not generally welcomed. The survey did not list "neighbors" as an option, but it would be interesting to explore through further research whether this response would be different from the response to "local residents." Due to the changing nature of these communities with recent increases in population growth

and development, local residents may be just as unfamiliar to local landowners as non-residents.

In general, for questions relating to opinions about land protection and collaboration, farmers appear to be supportive of land protection efforts and willing to work with most community groups (Table 4). Overall, farmers placed high priority on land protection and personally supported farmland protection efforts. The majority with regard to collaboration, farmers were more willing to work with other farmers than any other group. The results suggested that they were somewhat willing to work with the Trust, the town, and state agencies to protect farmland, as well. However, other community members and conservation organizations were ranked the lowest for potential collaboration.

Table 3. Groups Permitted Access to Private Farmland

Who	Number Permitting	Percentage of Total
Family	15	83.3%
Other Farmers	14	77.8%
Hunters and Fishermen	10	55.6%
Local Residents	8	44.4%
Other Clubs or Tourists	3	16.7%
Number of Groups Permitted Ac	cess	
None	3	16.7%
1 to 2	4	22.2%
3 to 4	8	44.4%
5 or more	3	16.7%

Table 4. Attitudes about Collaboration and Land Protection

	Mean <sup>a</sup>	$SD^b$
Willingness to collaborate for farmland protection	3.96	.66
1 = very unwilling, 2= somewhat unwilling, 3= neutral, 4= somewhat wi	lling, 5=very willing	
Willingness to work with local community groups	3.00	1.27
Willingness to work with other farmers	4.71	.73
Willingness to work with the Trust	3.29	1.27
Willingness to work with other conservation organizations	3.36	1.15
Willingness to work with town government	3.43	1.40
Willingness to work with state and federal agencies	3.64	1.28
1 =strongly disagree, 2=somewhat disagree, 3=neutral, 4=some 5 = strongly agree	what agree,	
Farmland protection is a priority for the Meadows	4.21	1.48
Personal support of farmland protection efforts	4.93	.27
Conservation easements are a good way to protect farmland	4.21	.80

<sup>a</sup>Scale: 1=strongly disagree, 2 = somewhat disagree, 3= neutral, 4 = somewhat agree, 5=strongly agree

<sup>b</sup>SD: Standard Deviation

In interviews and written comments, respondents revealed that many tended to approve of a combination of private ownership with public policies to protect farmland. A farmer in Glastonbury wrote that town ownership of Meadow land was problematic, "the Meadows and uplands should be owned by farmers, but preserved against development." Another farmer in Wethersfield agreed strongly that farmland protection is best left in the hands of farmers, but also approved of a recent purchase of land by the Great Meadows Conservation Trust. The same farmer did not approve of certain types of recreation on private land because of his concern about the recent town approval to allow motorbike events on a neighboring farm.

# **Opportunities**

In light of these responses, this study considered some of the opportunities for balancing public interest in increasing access to the Meadows while reducing conflicts with existing farming and hunting activities. Increased cooperation between local parks and recreation departments and farmers to monitor access to the Meadows was offered as a way to reduce concerns about illegal access and vandalism to crops. Local governments might consider financial incentives such as tax breaks to private landowners who are willing to allow public access to their land or who allow certain recreational activities to occur on their land. Another proposal was considered to offer seasonal access to property to reduce conflicts with farming activities or hunting seasons or to allow special access for specific events.

Efforts to keep farming economically viable in these communities could include establishing a community supported farm on town-owned farmland or with the cooperation of a local farmer. Community supported farms operate with the support of a group of community shareholders who financially support the farm and, in return, get a share of the farm products. Such farms often include recreational and educational components, as well and could be a good way to promote farming and help raise awareness about protection of the Meadows.

The existing relationships between farmers and sporting clubs could possibly be replicated with other community groups who may be interested in accessing the Meadows for organized activities such as hiking, birdwatching, or boating. Working through organized groups help reduce the likelihood of abuse by the users and can control frequency of access. Finally, improving signage and implementing an access permit program might be considered for allowing limited public access that alerts users of proper conduct and permitted uses in the Meadows.

### Discussion

This workshop asked attendees to consider some of the solutions proposed by the researchers in these studies and to offer their own insight from their own research or observations. The discussion focused on the following general topics:

- 1) What is the role of recreation in preserving farmland and forests?
- 2) What are some examples of cooperative agreements that have allowed recreation on private land?
- 3) What organizational structures are effective for managing and maintaining recreational activities that occur on private land?
- 4) What is the role of recreation planners and managers in facilitating or organizing recreation partnerships with private landowners?

There seemed to be general consensus between workshop attendees that encouraging recreation on private land was a difficult endeavor. Participants agreed that allowing recreation to occur along with other activities such as farming and forestry would be difficult to manage and such a solution should probably be avoided where conflicts are likely. Some proposed that the best solution was to purchase the land outright for recreation. Others warned that introducing too many different uses in areas such as the Great Meadows could invite conflict between users.

With these caveats, participants did offer some examples of areas where recreation on private land had succeeded. Examples mentioned included the northern Maine woods and a cross country ski program in Jackson, NH. In the Maine woods, the land is owned by private timber corporations and the public is allowed to recreate in certain locations. In Jackson, NH, a group of property owners has an arrangement that maintains a system of cross country trails on their private land. Users buy a ski trail pass at locations in the town and the money goes to support the maintenance of the trail system. By developing an extensive ski trail network, the local government is able to market the area widely and draw a large tourist base to bolster the local economy.

Participants in the discussion suggested that having a special group or organization that can oversee the management of such agreements is an effective way to establish a partnership of this sort. For example, in the Great Meadows the farmers are willing to work with the sporting club groups but would be reluctant to have to deal with multiple members of the public. The proposal to charge users a fee has problems is often a hassle for the landowners and, depending on state laws, can make the landowner liable for injuries or accidents that might occur. However, participants seemed to think that other financial incentives or a collection of fees administered by the town or other group might be worth considering, such as purchasing trail easements from private landowners.

As for the role of the recreation planner or manager in these arrangements, participants in the discussion recommended that it might be helpful to work with the individual landowners to come up with management plans for their private property. They could discuss strategies to incorporate a variety of uses might occur in a way that works best for the landowner. Another role for recreation planners may be to help develop a comprehensive system of trails that responds to individual landowner concerns.

## Conclusion

As urbanization in the Northeastern United States continues, protection and management of open spaces

continue to be a concern for many communities such as those represented in this case study. Recreational planners and managers will have to find ways to balance protection of these remaining natural areas with a growing demand for public access. Faced with the limited availability of land for these uses, planners in these areas should consider the potential for privately owned open spaces to help meet these demands. Recreation planning may require innovative strategies to develop public-private partnerships for use of private agricultural and forest lands. This discussion provided insight into some of the potential obstacles to this approach as well as examples of some collaborative efforts that have been successful. Continued discussion on this issue will be useful for determining the future of recreation and open space protection in the Northeast.

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