

Early Roots of Greenway Design: A Look at Frank A. Waugh's Ecologic and Scenic Study Plans from the 1930's

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Abstract

Frank A. Waugh, the founder of what is now the Department of Landscape Architecture and Regional Planning at the University of Massachusetts Amherst, planned in the 1930s a series of 'pleasure drives' for the area around Amherst, MA. These drives can be seen as precursors to today's greenways, designed for automobile driving rather than walking. This paper will explore the goals of these pleasure drives, the possibility of their relation to the construction of the Quabbin Reservoir, Waugh's interest in making the landscape environment available to a diverse group of users, and a brief suggestion about the evolving attitude toward automobiles.

Introduction

Frank A. Waugh (1869-1943) founded in 1903 a program of Landscape Gardening at the Massachusetts Agricultural College, now the Department of Landscape Architecture & Regional Planning (LARP) at the University of Massachusetts Amherst. By the start of the 1930's, the program had a strong emphasis on the study of native plants in relation to such natural factors as climate, land orientation, slope, soils, water, and drainage. Waugh's own works from this time constitute early studies of ecology and regional landscape planning (Waugh 1926, 1931a, 1931b, 1932a, and 1932b). In addition to articles about native planting and roadside design, Waugh and his colleagues proposed at least four designs for landscape circuit routes. These suggested routes for pleasure drives can be viewed as precursors of greenway design, intended for autos rather than walkers. They included *A System of Pleasure Drives*, undated (Figure 1); *Old Hampshire Scenic Circuit, 100 Miles, Over the hills and home again* (Figure 2); *A Forest Circuit, 60 miles* (Figure 3); and *Swift River, Circuit in the New Reservoir, 52 Miles* (Figure 4), all from 1933. One example of Waugh's consulting work for the United States Forest Service (USFS) will be presented with an emphasis on these four little-known proposals as evidence for Waugh's interest in getting people to explore and enjoy their surrounding forest and scenic landscapes, much as contemporary greenway proponents advocate exploration on foot.

Waugh's pleasure routes appear to have anticipated plans for a major new construction project, that of the Quabbin Reservoir, which was approved in 1927 and completed in 1946. Waugh's studies can be seen as early roots for the LARP Department's current landscape planning activities. Waugh advocated that landscape planning and design benefit everyone, not just the wealthy elite. Today LARP builds upon this core value to include diversity and equity issues. During his 40-year tenure based in Amherst, Waugh enthusiastically exhibited a deep passion for landscape planning and design studies for the benefit of everybody. It is such passion that remains as perhaps the most important ingredient to healing the landscape with greenways today. Waugh's contributions should

not be overlooked. They warrant additional research. A few ideas for future work will be suggested in this paper.

Background and Literature Review

From 1917-1926 and informally through the thirties, Waugh consulted for the USFS and would spend some of his summers traveling all around the country. His work took him Midwest to Oklahoma, Kansas, South and North Dakota, Southwest to Arizona, New Mexico, and Utah, West to California, Northwest to Oregon, and Southeast to Alabama, Florida, Louisiana, South Carolina, and Georgia. He visited national forests across the country to offer recommendations on such topics as roads, campsites, trails, and views. Waugh published a plan for the Village of Grand Canyon, which was still part of the national forest then, in a pamphlet called *Landscape Engineering in the National Forests* (Waugh 1918).

Greenway planners today will be interested in Waugh's stated concerns about the need to consider more diverse users. From August 18 to August 24, 1923, Frank A. Waugh, noted as "Recreation Engineer" for USFS, visited the recently established Bryce Canyon National Monument. Although the monument was recognized as "a scenic and recreation area of national importance," Waugh (1923a) lamented that the decision had come too late to prevent the Union Pacific (UP) Railroad from purchasing part of Section 36, T36S, R4W from the State of Utah. That section was situated in the most popular tourist area along the rim, and Ruby Syrett had located "Tourists' Rest" there. Waugh complained that the UP purchase placed the company "through its subsidiary organization [Utah Parks Company], in practical control of the administration of the whole National Monument." Waugh worried that since the Union Pacific owned or leased the heart of the monument, the USFS would play only a secondary role in its administration. He proposed that the USFS should move to ensure that the UP serve the greater public interest by establishing and enforcing firm, clear guidelines for the concessioner's activities.

Waugh had to accommodate the fact that the outlined plan placed the care of all visitors in the hands of the Utah Parks Company (UPC), thereby granting the company "a practical monopoly of the business within the National Monument." Since the Union Pacific Railroad controlled a strategic location, Waugh realized that the USFS would have minimal responsibility for developing and maintaining tourist facilities. However, he prepared a site plan suggesting where the various facilities should be located, and he described the areas and structures to be administered by the USFS. These included the reservation of a public campground (located south of the UPC's Bryce Canyon Lodge), a platform and overlook at President Harding Point, a shelter near the overlook (about 200 feet away from the rim), two toilets near the shelter, simple benches at two points on the rim between the lodge and President Harding Point, a log portal at the north entrance to the monument, and improvements on the trails within the canyons below the plateau rim. Waugh recommended that the structures be built with yellow pine logs. Waugh based his design for public accommodations on his understanding of the people that would most likely utilize the park. He identified three classes of tourists. First, the comparatively affluent were brought by the railroad company and sought first-class accommodations. Second, the travellers of moderate means came by railway or private car and preferred more moderate accommodations, such as cabins or tent cities. Third, automobile travellers who carried their own tents and camp equipment sought only

clean and safe campgrounds. Waugh preferred that the railway company be responsible for all tourist facilities, but if they ignored the latter two groups, the USFS should provide the facilities or find another concessioner to manage them. In the case of Bryce Canyon, the USFS managed the public campground. Waugh wanted the monument to be enjoyed by everyone, not just the wealthy who could so readily afford to travel first-class from a distance on the train. More can well be researched about Waugh's landscape planning studies. There are a few publications which can help provide extensive references and sources for additional investigations (Bischoff 2024; Crewe 2003; McClelland 2007).

Method and Data

The methods for this paper include historical, library and archival research. The data include the discovery of four maps about scenic drives from the local area; these could be considered as precursors to greenway trail planning and design. By comparing these maps insights to the type of connectivity they show can be made. It is because of this connectivity that these plans can be considered as precursors to greenway planning. The map about the Swift River will be given special attention because of contemporary issues.

Results and Discussion

Four maps discovered in the Frank A. Waugh Papers (FS 088), Special Collections and University Archives, University of Massachusetts Amherst Libraries are of key interest for this paper. Figure 1 (*A System of Pleasure Drives About Amherst, Mass*), showing several proposed routes in heavy lines, is undated and credited as photographed by Waugh. This map presents a number of short circular and in-and-out routes, all close to Amherst. The subsequent three figures contain longer (50 to 100 mile long) routes, with designs credited to F.A.W in 1933. These three maps promote the connections of local towns to rural, forested areas. Figure 2 (*Old Hampshire Scenic Circuit Over the Hills and Home Again*) circles from Greenfield in the north to Springfield in the south, cutting through the Berkshires in the west and the land later to be abutted by the Quabbin Reservoir in the East. Figure 3 (*A Forest Circuit 60 Miles*), circles through several state forests north and east of Amherst. Figure 4 (*Swift River, Circuit in the New Reservoir, 52 Miles*) includes several towns and open areas that would be subsequently flooded, between 1939 and 1946. These last two maps feature the form of a linear network connecting nodes of interest. With connectivity so crucial to greenway planning, these maps anticipate future approaches.

Waugh's personal daily diaries (now available at Harvard University's Frances Loeb Library Special Collections) do not mention these maps. But an entry for March 30, 1933, the year of the dated maps, describes how the Department of Landscape Architecture 'fathered' the 'First Annual Roadside Institute,' with a presentation by Arnold Davis and an unexpected attendance of 200 (Waugh 1923). It is tempting to speculate that these maps were prepared in support of this Institute. It is further tempting to speculate that the impending development of the Quabbin Reservoir motivated the development of driving routes that explore the Swift River area prior to the planned flooding.

One can find some useful information about the area of the Quabbin in a blog presented by Massachusetts State Senator Jo Comerford (2023), who seeks recompense for the Swift River Valley and its people through the proposed legislation *H. 897 / S. 447 An Act Relative to the Quabbin Watershed and Regional Equity*. This blog offers a helpful and concise history of the Swift River. It notes that before the colonists arrived, the Swift River Valley was home to the Nipmuc, an Algonquin word meaning “freshwater people”. They called the Swift River Valley “Qaben” – meaning “place of many waters.” After arrival of the Europeans, plagues and wars decimated the Nipmuc and other Indigenous tribes. Beginning in 1732, the Massachusetts legislature began giving land grants to settlers who fought against Indigenous tribes and in the 1740s they began settling the Swift River Valley. About 3400 people lived in the valley’s four towns of Dana, Greenwich, Enfield, and Prescott in 1850. When the Quabbin Reservoir project to supply water to metropolitan Boston was confirmed in 1922, over 2,400 still lived there. Although the Quabbin Reservoir project was confirmed as early as 1922, legislation to flood the Swift River Valley, to provide drinking water to Boston, did not pass until 1927. The deadline for leaving and removal was 1938, but the clearing of the land began much sooner. Flooding began in 1939 and was completed by 1946. So, the maps that Waugh designed were made when flooding of the land was expected, but not yet begun. The maps, especially Figure 4, clearly anticipated scenic drives in and around the area of the proposed reservoir while they were still possible.

Conclusion

Three of the 4 maps, Figures 2-4, emphasize the connection of local towns to rural, forested areas. Two maps show linear elements with nodes. This is significant as connectivity is a crucial aspect of greenway planning. A final note of interest: In the present time, many people are anxious to get away from their cars and all the traffic and take long walks in beautiful landscapes. Modern-day greenways, especially ones located near urban areas, meet this need. In the 1930s, scenic drives constituted an evolving leisure activity. Roads were being engineered for these “motor wagons,” and automobiles were becoming more reliable for this relatively new form of leisure touring. One no longer needed to anticipate a tire blowout when driving 50 to 100 miles. Outings for scenic drives became a popular new inexpensive leisure activity. Recreation in the day included a scenic Sunday drive to take in forest landscapes. Waugh’s pleasure drives would have met this need, just as today’s greenways meet the need to get away from the car and take a hike in the woods.

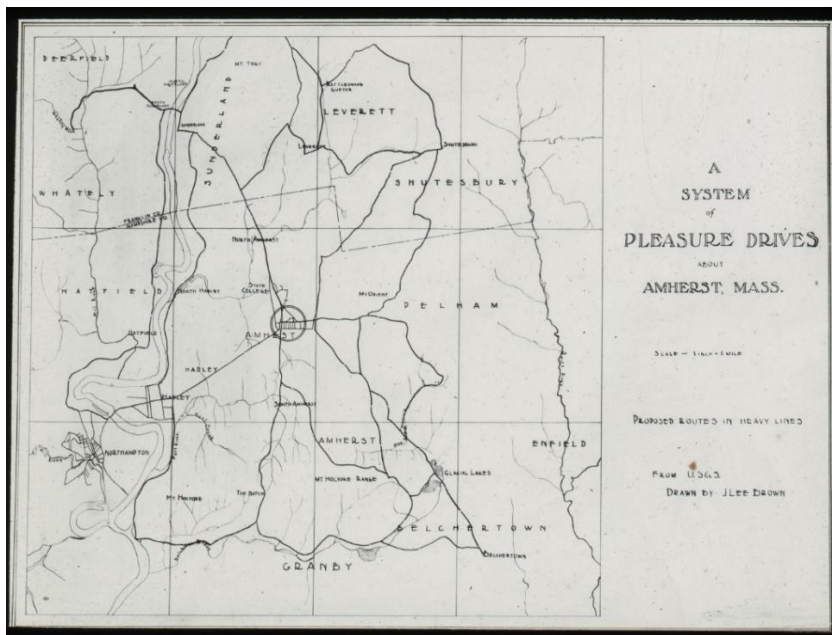


Figure 1. A system of pleasure drives about Amherst (map), undated. Frank A. Waugh Papers (FS 088). Special Collections and University Archives, University of Massachusetts Amherst Libraries. <http://credo.library.umass.edu/view/full/mufs088-b030-i908>

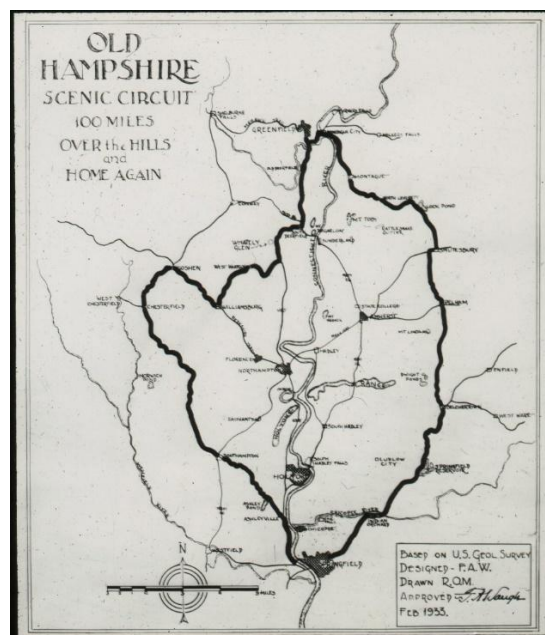


Figure 2. Old Hampshire Scenic Circuit 100 Miles, Over the hills and home again. Frank A. Waugh Papers, (FS 088). Robert S. Cox Special Collections and University Archives Research Center, UMass Amherst Libraries. <http://credo.library.umass.edu/view/full/mufs088-b030-i916>

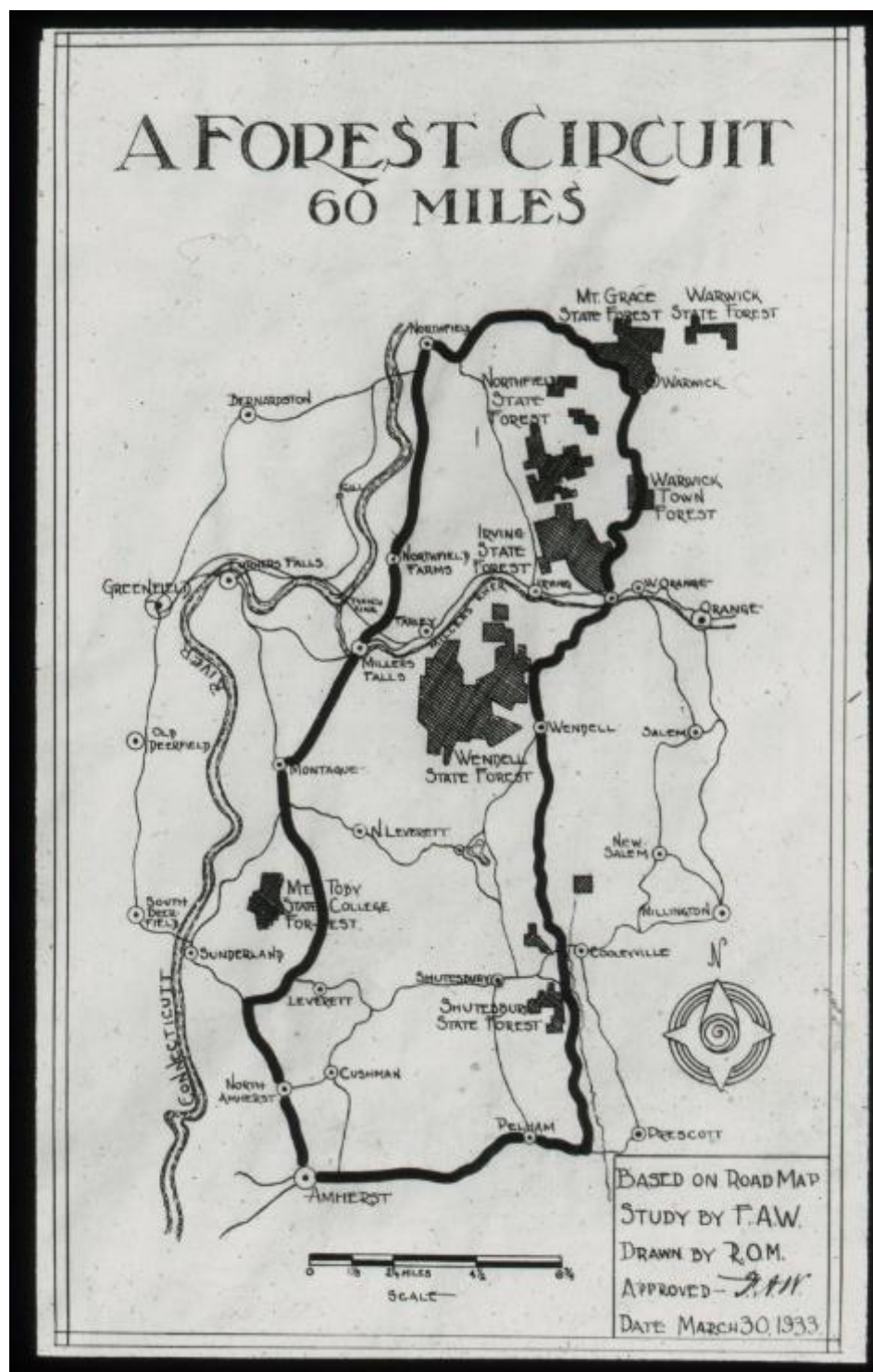


Figure 3. A Forest Circuit, 60 miles, 1933, Frank A. Waugh Papers, (FS 088). Robert S. Cox Special Collections and University Archives Research Center, UMass Amherst Libraries.
<http://credo.library.umass.edu/view/full/mufs088-b030-i909>

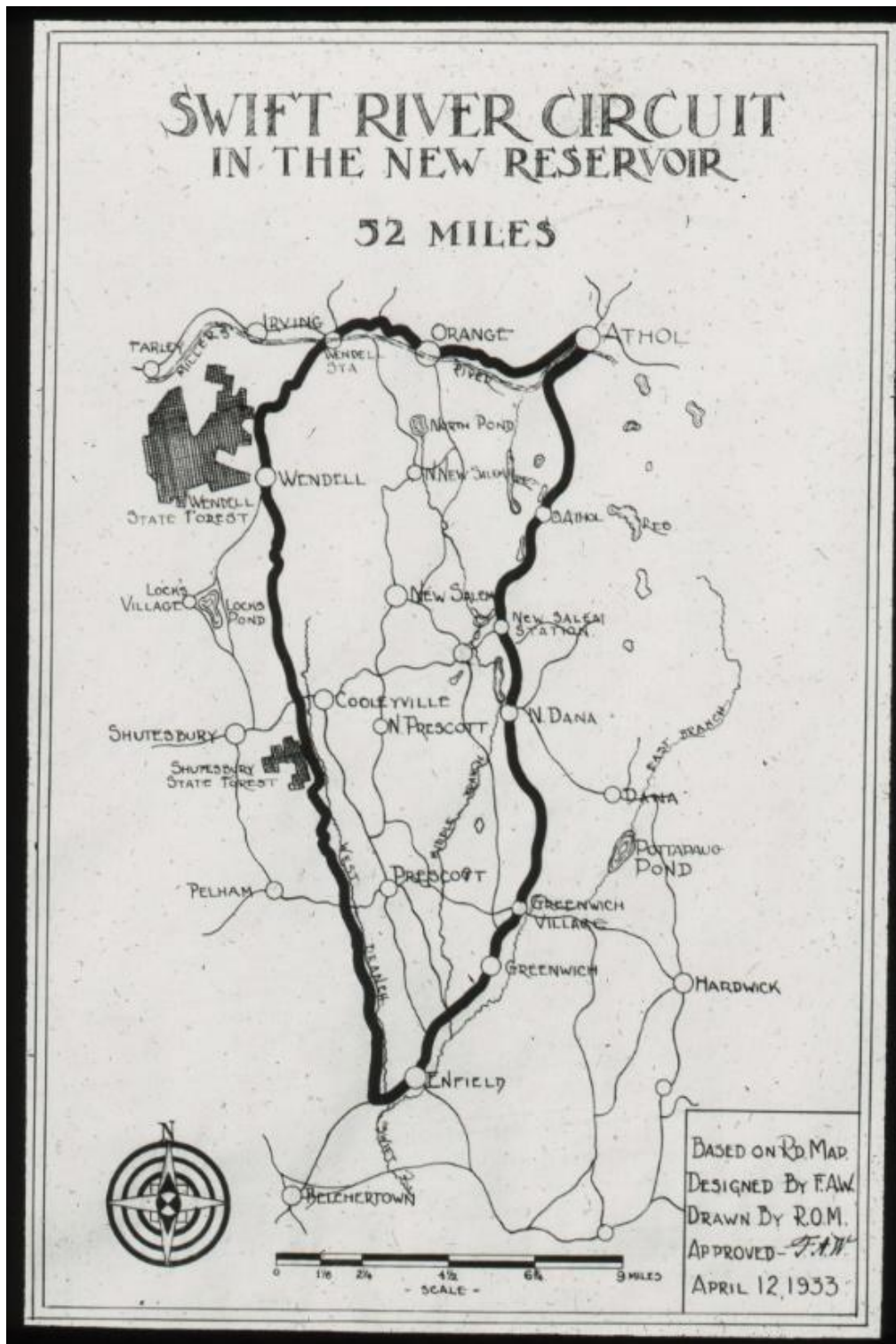


Figure 4. Swift River, Circuit in the New Reservoir, 52 Miles, 1933, Frank A. Waugh Papers, (FS 088). Robert S. Cox Special Collections and University Archives Research Center, UMass Amherst Libraries.
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