

Robert R. Churchill Memorial Fund

The Robert R. Churchill Memorial Fund was established in 2006 in memory of Bob Churchill, former Middlebury College professor of geography and founder and director of the GIS program. Bob Churchill trained more than 900 students in different aspects of GIS, and many of these former students are now leaders in the field. The primary goal of the Memorial Fund is to support student internships, with preference given to programs related to geography and/or GIS. Internships are an important aspect of the Middlebury educational experience because they encourage real-life problem solving, teamwork, and the application of data. Internships also provide students with the opportunity to explore a particular subject area in depth.

Funding needs and structure

Currently, internships are supported through the direct expenditure of donations to the fund, but the long-term goal is to endow the fund to be able to support up to nine internships per year.

Financial administration

The Churchill Fund is administered by Professor Tamar Mayer, currently the Chair of the Middlebury College Geography Department. Dr. Mayer determines the annual available funds and works with the Department's GIS Specialist to assign the funds to appropriate internships. Most of the internships are supported by matching funds from a sponsoring organization. This model has two advantages. First, the sponsoring organization has an investment in the project and is likely to pay close attention to the project and the intern. Second, co-funded internships allow the Churchill Funds to go further, thus providing internship opportunities for more students.

Intern Qualifications

Internships are open to all Middlebury students, but they must have taken at least one course in GIS and/or cartography. Each year, approximately 125 students take either GIS or cartography, so there are always an ample number of students interested in these internships. Each spring, a variety of internships are developed to appeal to students from the social and natural sciences (e.g. geography, geology, ES, economics, biology, chemistry). The GIS Specialist identifies potential opportunities and works with sponsoring organizations to design internships that benefit both the organization and the student. Each internship opportunity is advertised on campus and through the Career Services Office, and students are encouraged to apply. The sponsoring organization reviews the internship applications and collaborates with the GIS Specialist to select the intern(s). In some cases a student may identify his/her own internship opportunity and then work with the sponsoring organization and the GIS Specialist to create a workable internship experience.

Supervision/Guidance of Interns

All internships are coordinated and supervised by the GIS Specialist within the Geography Department. This role of Intern Supervisor is specifically included in the job description of the GIS Specialist.

Internship coordination requires a substantial time commitment during the spring semester in order to identify and organize internship opportunities. During the summer, the GIS Specialist works closely with the student intern and sponsoring organization on administrative, scheduling, technical, and analytical issues. Most of the internship opportunities are located in New England making it easy for the GIS Specialist to visit the intern work site during the summer. Some internships utilize the GIS lab facilities at Middlebury College, and other internships require students to work primarily at the sponsoring organization's office. In both cases, the main goal is to make sure that the student intern develops a strong understanding of the sponsoring organization's goals and mission and that he/she is seen as a member of the organization.

Internships for 2007

Following is a list of several internship opportunities available for the summer 2007. These internships are funded through the Churchill Fund, established in 2006, in honor of Bob Churchill. The internships are open to all current Middlebury students with the appropriate academic background (must have taken GIS or Cartography).

Food Mapping Internship

This internship will help build the foundation for local food purchasing at Middlebury, both in Dining Services, and among fellow students, professors, and community members. The internship involves collecting, analyzing, and mapping data sourcing for Middining's 10,000+ food items. Additionally, the intern will identify, to the best of their ability, those products that are genetically modified (GM), with the goal of reducing the amount of GM food purchased by Middlebury. Much of the work will take the form of posters in dining halls on campus and a written report to Dining Services. Presentation of the work at a Middlebury Local Foods Conference in 2008 is also possible.

The project will enable Dining Services to make more informed purchasing decisions and better market Middlebury's local foods initiative. It will also foster a stronger culture of local foods at Middlebury, and set a measurable standard for institutional food purchasing.

GIS Support for Champlain Orchards

Champlain Orchards is a family-owned and operated farm in Shoreham, Vermont. They specialize in growing Macintosh, Empire, Cortland, Gingergold, Honeycrisp, Gala, and fifteen other delicious varieties of apples on 160 acres, as well as raspberries, plums, peaches, cherries, pumpkins, and mixed vegetables. They produce a variety of products including fresh apple cider, apple butter, apple sauce, and sliced apples for pies.
<http://www.champlainorchards.com/index.htm>

Champlain Orchards strives to produce all its crops in an environmentally sensitive and sustainable manner. In an effort to supply high quality fruit to consumers, significant time and effort is invested in pruning each tree, hand thinning fruit in the spring, harvesting, storing, marketing, and distributing the fruit.

Champlain Orchards is seeking an intern to assist with several GIS analysis and mapping tasks. Using GPS and other techniques, the intern will develop detailed GIS layers and maps of the orchards and farm. This information will be used to improve on-farm inventory control, crop management, and planning. The resulting maps and data layers will also be used to support visitor education initiatives.

As time permits, the GIS intern will also assist with examining Champlain Orchards current product-distribution network with the goal of increasing overall efficiencies and

identifying market expansions. Special GIS tools will be used that allow complex “network” analysis not possible without the aid of computer technology.

GIS Support for the Use Value Appraisal Program

This project involves the continued mapping of Use Value Appraisal (UVA) lands in Addison County. The Vermont Use Value Appraisal program provides tax incentives to land owners that agree to keep their lands in active forest or farm management. Steve Chester has been working with the Addison County Forester on this project for the last year and has completed the initial GIS data layer. The second stage of this project will include the development of a process for annually updating of the Use Value parcels. It will also require some map production, and work with the county forester and the VT Department of Forest Parks and Recreation to identify and document different useful applications of these data for forest management and conservation. See the 2006 internship descriptions for more details.

Vermont Archeological Database Development

The student intern will work directly with the State Archeologist, Giovanna Peebles, to create digital records for all known archeological sites. This is a big project and it has been worked on for several years. The project may include some additional work developing and testing a system for identifying archeologically sensitive areas. See the 2006 internship descriptions for details.

Past Internships

Over 30 different internships have been sponsored in the past seven years through a variety of mechanisms. A complete list of all these internships is available upon request.