

**Status Report for
OUR LIVING CAMPUS:
An Interactive Environmental Content Management and Mapping Tool Designed to
Enhance Student Learning and Participation**

Peter Motavalli, John Gardner, Chris Barnett, Steve Burdic, Keith W. Goyne, Charles Nilon, and
Peter Ashbrook

Brief Description of the Project:

The purpose of this project was to develop an interactive web-based environmental content management and mapping tool for the University of Missouri campus. The web-based system is designed to enhance student learning and awareness of environmental issues. It will also facilitate the development and coordination of campus-based environmental projects and course assignments. The tool will provide ways for students to enter geographically-referenced environmental information, such as through Google Maps. The tool has the potential to become a highly visible focal point for student environmental education by increasing participation in active learning activities and by providing relevant “living” examples that illustrate environmental issues.

Progress and Activities for the Project:

We have made significant progress with the project. Input was provided by the Principal Investigators on the organization and features of the website and a website name was registered (www.ecomapper.org). Ecomapper is organized around projects which students and instructors initiate and populate around campus environmental issues. Privileges on access to the products and data in the project are set by the members of the project. The projects and a brief description of their content can be displayed so people entering the site can see the past and ongoing projects being undertaken. In the Mapping Tool area, users are able to add any points, lines or polygons to the map and save that information to the database. Other areas of interest in the website are the project management modules, wiki, blog, and data upload modules to name a few.

Access to projects and to the website is controlled through a login and password which allows for collection of information related to users during the registration process. Since the soft launch of the site in September we have limited user statistics. However, as the semester progresses, we should have the necessary statistics indicating use and success of the project. We hope to use this first soft launch as a beta test to find out from the users the likes and dislikes of the site. With this knowledge we will be pursuing additional funding to further the development of the site. Below are a few key features of the website. Since the soft launch on September 1, 2011 additional features have been added and more features are currently being planned as funding becomes available.

OUR CAMPUS ENVIRONMENT

Register Login

Home | Community | Help

WELCOME TO OUR CAMPUS ENVIRONMENT

This is an interactive web-based environmental content management and mapping tool for the University of Missouri campus that is designed to enhance student learning and awareness of environmental issues and facilitate the development and coordination of campus-based environmental projects and course assignments.

This Our Campus Environment tool can be used by students for class assignments as well as for independent projects. This tool will provide students with the necessary tools with which to make better environmental decisions.

Register

In order to use the website you must register. Click the button below to get registered.

CLICK HERE TO REGISTER

Account Login

User Name:

Password:

Login

Remember Login

Register

Forgot Password ?

Description

The growth of “green campus” initiatives around the country has demonstrated the interest of students in not dealing with environmental issues as abstractions or academic exercises, but in also instituting sound environmental management and awareness on the campus in which they live, learn and play. The University of Missouri campus provides an excellent location for student learning about environmental issues since it faces several environmental challenges common to rapidly growing urban areas including storm water runoff pollution, air and water pollution issues from the coal-fired power plant, toxic waste disposal, and soil erosion caused by construction projects that can enter into surrounding creeks.

Terms Of Use | Privacy Statement | Copyright 2011 - CARES - University of Missouri

Figure 1. The website home page.

Figure 1 is a screen shot of the website home page. Since the inception of the website we had some feedback from a few students over the summer. During this time the students felt that the “Our Living Campus” name wasn’t correct and asked us to name the website “Our Campus Environment”. In order for a user to use this website they must begin the process but clicking the register button located on the home page.

OUR CAMPUS ENVIRONMENT

Register Login

Home | Community | Help

Register

New User Registration

Do you want to register with a Group?

No thanks I do not want to register with a group right now. ▾

PROCEED WITH REGISTRATION

Terms Of Use | Privacy Statement | Copyright 2011 - CARES - University of Missouri

Figure 2. Registering a new user

When a new user registers with the system they are prompted to register with a group or to register as a private user as seen in Figure 2.

Once a user has registered for the website they are automatically welcomed to the website and asked if they would like a tour of the site (Figure 3).

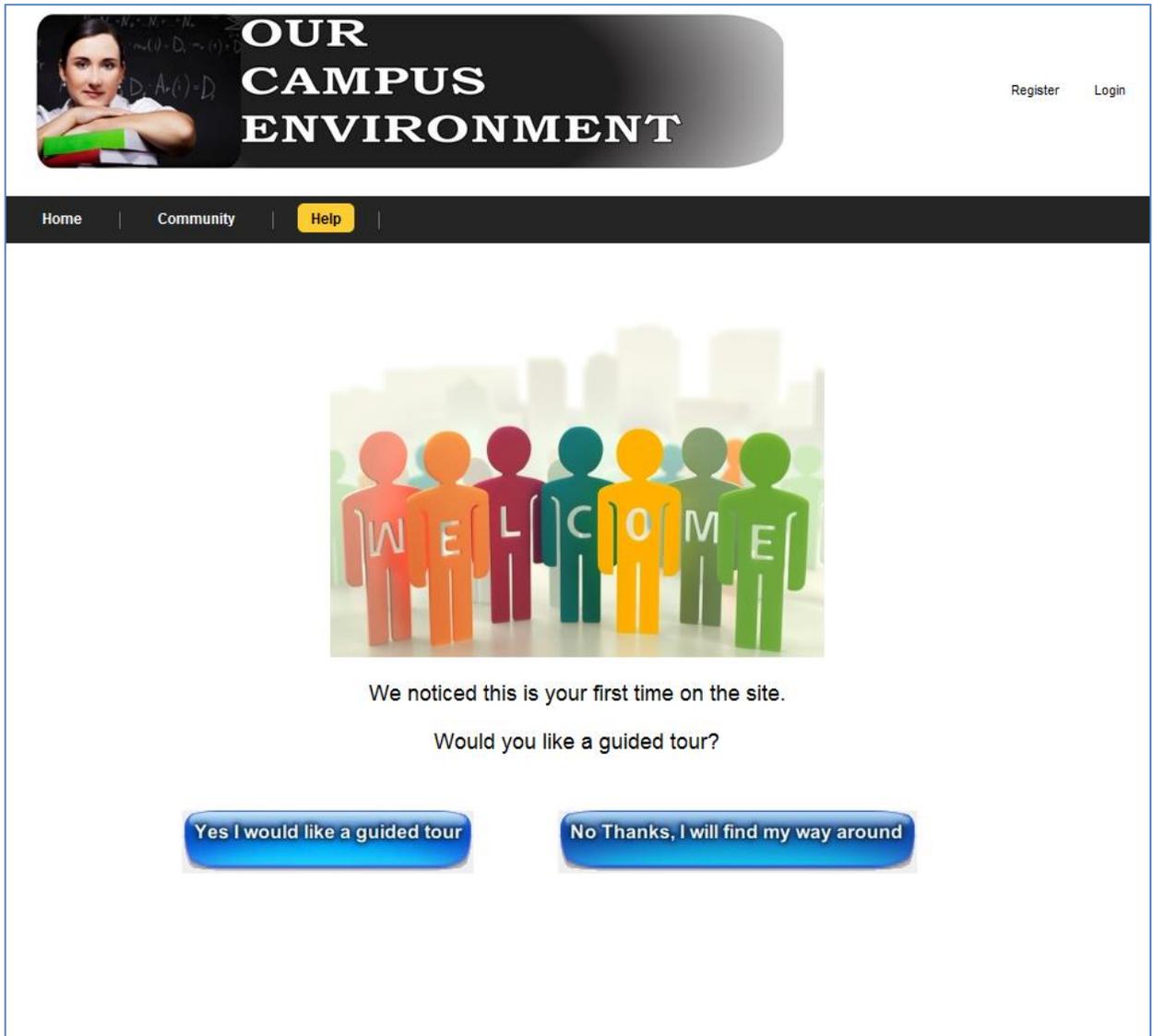


Figure 3. After a user registers with the website the user is prompted for a guided tour.

Some other key features of the web site are the Google Maps (Figure 4). Registered users can add any point, line or polygon on top of the map. The users also have the ability to turn on US Topographic Layers, Terrian Layers, Satellite Layers.

OUR CAMPUS ENVIRONMENT

lucygoyne [Switch Projects](#) [Logout](#)

Home | Projects | **GIS Tools** | Management | Community | Help

LOCATION MENU (click to toggle visibility)

-- PLEASE SELECT A STATE -- | -- PLEASE SELECT A COUNTY -- | -- PLEASE SELECT A CITY --

Uncheck to use your mouse scroll wheel to adjust zoom levels on the map [Create A Map](#)

Points | Lines | Polygons

Map | Collapse Categories | Expand all Categories | Turn off Data Layers

Add Feature Attributes Close

Data Layer Name: Walking Path

Add OR Select a Category: WALKING TOL

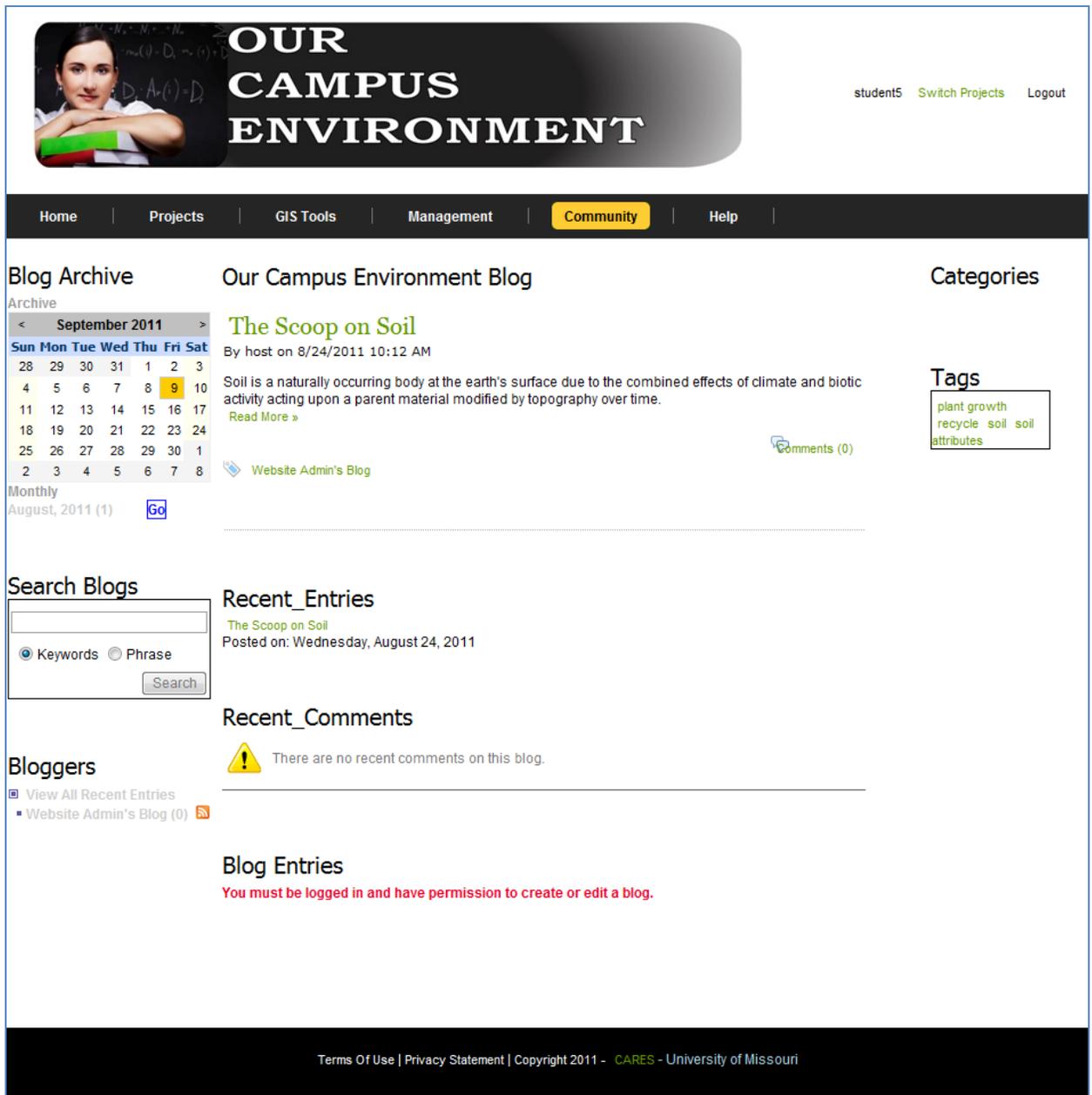
Data Security: Private

Public Description: This is a new walking tour.

Figure 4. Users can add points, lines and polygons to the map and save to the database.

Registered users also have the ability to print the map (Figure 5).

In the Community Module there are two features. One is the wiki and the other is the Blog. In order to add comments, documents, list, etc a user must have a Blog permission role to add data as seen in Figure 6.



The screenshot displays the 'OUR CAMPUS ENVIRONMENT' website interface. At the top, there is a navigation bar with links for Home, Projects, GIS Tools, Management, Community (highlighted), and Help. The main content area is divided into several sections:

- Blog Archive:** A calendar for September 2011 with the 9th highlighted.
- Our Campus Environment Blog:** A featured blog post titled 'The Scoop on Soil' by host on 8/24/2011 10:12 AM. The post text reads: 'Soil is a naturally occurring body at the earth's surface due to the combined effects of climate and biotic activity acting upon a parent material modified by topography over time.' It includes a 'Read More »' link and a 'Comments (0)' link.
- Categories:** A list of tags including 'plant growth', 'recycle', 'soil', and 'soil attributes'.
- Search Blogs:** A search box with radio buttons for 'Keywords' (selected) and 'Phrase', and a 'Search' button.
- Recent Entries:** A list showing 'The Scoop on Soil' posted on Wednesday, August 24, 2011.
- Recent Comments:** A warning icon and the message 'There are no recent comments on this blog.'
- Bloggers:** A section with a link to 'View All Recent Entries' and a sub-section for 'Website Admin's Blog (0)'.
- Blog Entries:** A red error message: 'You must be logged in and have permission to create or edit a blog.'

At the bottom of the page, there is a footer with links for 'Terms Of Use', 'Privacy Statement', and 'Copyright 2011 - CARES - University of Missouri'.

Figure 6. Users with only Blog permission can write in the blog but all users can read the blog entries.

The last item is the file upload capabilities. Users can go the file upload module and upload data to share among the group or to just keep with an existing project as seen in Figure 7.

The screenshot displays the 'OUR CAMPUS ENVIRONMENT' web application. At the top left, there is a banner with a woman's portrait and the text 'OUR CAMPUS ENVIRONMENT'. To the right of the banner, the user 'lucygoyne' is logged in, with links for 'Switch Projects' and 'Logout'. Below the banner is a navigation menu with 'Home', 'Projects' (highlighted), 'GIS Tools', 'Management', 'Community', and 'Help'. The main content area is titled 'Data Upload' and contains the following elements:

- A prompt: 'Please click the browse button to select a file or files to upload.'
- A file path input field: 'C:\Workdata\Our_living_Campus\Documents\Our Living Campus2.zip' with a 'Browse...' button.
- A description input field: 'Description for the Uploaded File (Default description is: Uploaded Data)' with the text 'Uploaded Sample Data' entered.
- An 'Upload Zip file' button.

At the bottom of the page, there is a footer with the text: 'Terms Of Use | Privacy Statement | Copyright 2011 - CARES - University of Missouri'.

Figure 7. Users can upload data to be shared with a group or just to attach to a project.

Once the data is uploaded the users can view all the data that was uploaded and export out the results of all uploaded or group by type as seen in Figure 8.

The screenshot displays the 'OUR CAMPUS ENVIRONMENT' web application. At the top right, the user is logged in as 'student5' with options for 'Switch Projects' and 'Logout'. The navigation menu includes 'Home', 'Projects' (highlighted), 'GIS Tools', 'Management', 'Community', and 'Help'. Below the navigation, the page title is 'Data List overview for the project titled: *New Class Project*'. The main content area features a tabbed interface with 'DOCUMENTS' selected. An 'Export to Excel' button is located above a table with the following data:

ID	Documents	File Type	Description	Date Added	Security	Email
1	Our Living Campus2.ppt	.ppt	Uploaded Data	9/8/2011 8:57:35 PM	Private	

Figure 8. Uploaded data can be shared with a group or a list of data can be exported out to an excel spreadsheet.

Summary Description of the Project:

We developed an interactive web-based environmental content management and mapping tool for the University of Missouri campus. This web-based system will enhance student learning and awareness of environmental issues. This tool provides the user a way for students to enter geographically-referenced environmental information, using Google Maps Interface. The website was soft launched on September 1, 2011. Over the next couple of month's we will be using this tool for testing and demonstrations for students and faculty alike. This tool can potentially become a highly visible focal point for student environmental education by increasing participation in active learning activities and by providing relevant "living" examples that illustrate environmental issues.