



# Newsletter

The State University of New York College at Geneseo

**T**he Roemer Arboretum Newsletter is back after a three-year hiatus. There has been a great deal of new activity in the last year with changes in the Arboretum Advisory Board and educational and research activities and we hope this new issue of the Newsletter is helpful in bringing you up-to-date with these recent activities. We welcome your comments (see "Get Involved," page 3).

## EDUCATIONAL ACTIVITIES

**T**he Arboretum continues to serve the College and Geneseo communities as an educational resource. The Arboretum is used by several classes, including Principles of Ecology, Plant Taxonomy, General Biology, and Population and Community Ecology.



Students from Principles of Ecology take a walk through the Arboretum with Dr. Hartvigsen

In addition to course work, several nature walks took place. Dr. Gregg Hartvigsen of the Biology Department led a winter walk for undergraduates of the newly formed Ecology Club. These students are interested in developing a nature walk program for local area residents and school children. The Ecology Club hopes to lead several walks through the Arboretum and inspire the young and old to both understand and appreciate nature.

Dr. Ray Spear of the Biology Department and Audrey Laucht, Grounds and Landscape Manager on campus, organized an activity day in conjunction with Arbor Day 1999. The Arboretum sponsored a Master Gardener from the Cornell Agricultural Extension Office who provided information and hands-on experience with how to care for various plant species. Complimentary refreshments were served.

## STUDENT RESEARCH

**U**nder the direction of Dr. Gregg Hartvigsen, our new Assistant Professor of Ecology in the Biology Department, three students completed research projects in the Arboretum this past summer and fall. Through generous support from the Geneseo Foundation these students investigated various aspects of the natural history of the Roemer Arboretum.

Jennifer Caito ('01) used the College's global positioning system (GPS) to map the location (within millimeters!) of the diverse plant communities and trail system. This information was then entered into a computer-based geographical information system (GIS) and used to generate many different types of maps. These

data also will serve future students conducting research in the Arboretum.

We began a study of plant competition and community development in a site called the Long-Term Ecological Research Project (LTERP). This project, under the direction of Dr. Gregg Hartvigsen, is an integral component of his research investigating how individual plant growth influences plant community change over time (or sometimes referred to as "succession").

With the help of students and members of the Biology Department, and funding by the Geneseo Foundation, we set up an enclosure fence around this small site to inhibit hungry deer and rabbits that frequent the Arboretum. Maura Wixted ('01) then spent many grueling hours helping two species of grasses get established. This was no easy task with Geneseo experiencing a severe drought! Maura conducted two different experiments in the LTERP plot and ran a third, related experiment in the Biology Department's greenhouse. She plans to publish her results this spring in the College's new SUNY Geneseo Journal of Science and Mathematics.



Jen Caito ('01), with the GPS unit, Maura Wixted ('01), and Christian Chiarelli ('01) in the Arboretum.

Christian Chiarelli ('01) was out in the Arboretum as well this summer conducting a quantitative assessment of

the plant species abundance. He established a 360 meter transect (or line) through the Arboretum and quantified the abundance of all plant species in paired 5 by 5 meter plots along the entire length of the transect. These data serve to provide baseline information for the current plant diversity in the Arboretum. The transect was mapped precisely by Jen Caito using the College's GPS so that future student researchers will be able to re-survey Christian's plots and determine the rate of change of vegetation through the Arboretum.

Christian also collected specimens of all the plants in the Arboretum, scanned them into the computer, and developed a "virtual herbarium" on the Arboretum's web site. This new resource provides a working herbarium for future students and researchers around the world as we track and identify the plant diversity in this part of New York State.

All three students registered to present these results at the National Council for Undergraduate Research, an annual conference that will be held in Montana this coming April.

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## CHANGES

The 1999 summer was very dry and prompted concern about the availability of water to plants in the Arboretum. This was of particular concern to the Long-Term Ecological Research Project (LTERP) study site. In conjunction with Physical Plant a water line was laid 900 feet from near the Gazebo to the research site. This access to water will ensure greater control of the various field-based

### The Arboretum Advisory Board

Members appointed by the President

Gary Girardet, Chair

Dr. Ray Spear, Education and Volunteers

Dr. Gregg Hartvigsen, Research and Education,  
Newsletter Editor

Audrey Laucht, Campus Grounds and Landscape  
Manager

Fred Bright, Historian

Roxanne Johnston, Geneseo Foundation and  
College Advancement

Patty Fennell, Community/Alumna Representative

experiments and survival of the Arboretum collection.

A section of the Arboretum that has previously been maintained as mowed grass will be "released," extending the area designated as "natural." This half-acre site, located at the south-end of the Arboretum, will save both time and money and will provide insight into the interesting ecological process of community development. Photo records and research plots will be established to document the changes.

A new bench was recently placed in the Arboretum. There are several benches throughout, giving walkers the opportunity to pause and enjoy the surroundings.

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## NEW WEB SITE UP AND RUNNING

The Arboretum now enjoys a "presence" on the World Wide Web. The site is home to a great deal of information about the Arboretum, including a virtual herbarium, or "verbarium," with photographs of all the known species of plants found in the Arboretum. This verbarium, undertaken by Christian Chiarelli ('01), is an exciting new use of the internet and provides documentation for our students to learn and study the plants of the Arboretum. Since the images are on the web researchers from all over the world have access to the images as well.

You also will find information on upcoming events, past events, and photographic tours, including an aerial photo history tour starting back in 1962.

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## NEW DIRECTIONS

The Arboretum Advisory Board met several times during the 1998-1999 academic year and drafted and

approved a mission statement for the Arboretum (see box on the back of this newsletter). The mission statement, recently approved by the College's President, outlines the Arboretum's commitment to integrating research, education. The Arboretum is dedicated to serving as a model for the conservation of natural areas through its activities for the College and the neighboring communities.

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## GET INVOLVED!

Individuals interested in memberships with the Roemer Arboretum are invited to contact Roxanne Johnston at the Geneseo Foundation (716.245.5518; [johnstor@geneseo.edu](mailto:johnstor@geneseo.edu)). If you are interested in finding out more about research or educational opportunities in the Arboretum please contact Dr. Gregg Hartvigsen in the Biology Department (716.245.5448; [hartvig@geneseo.edu](mailto:hartvig@geneseo.edu)). Those interested in volunteering opportunities in the Arboretum should contact Dr. Ray Spear in the Biology Department (716.245.5311; [spear@geneseo.edu](mailto:spear@geneseo.edu)). Finally, Fred Bright ([verybright@aol.com](mailto:verybright@aol.com)) oversees history of the Arboretum. Another good source of information on the Arboretum, along with regularly updated photographs and a schedule of events, is the Arboretum's web site (<http://arboretum.geneseo.edu/index.html>).



One of the many diverse plant communities of the Arboretum

## Mission Statement for the Roemer Arboretum

The Spencer Roemer Arboretum's mission is to encourage both the students of SUNY Geneseo and the Geneseo community to understand, enjoy, and preserve the natural world. This mission is accomplished through a blending of educational programs and student-oriented research, and through exemplary, ecologically-based management and conservation. The Arboretum provides opportunities to bring together members of both the SUNY Geneseo and Village of Geneseo communities to interactively experience the benefits provided by this centrally-located, natural heritage.

**Teaching and Community Education:** To provide an outdoor laboratory for use by faculty and students in Biology as well as other college departments, and the community of Geneseo. The Arboretum also seeks to provide outreach to the neighboring community with information about the natural world, Arboretum events, and publications of research activities.

**Research:** To support research in a broad range of subjects including ecology, field biology, conservation, and natural history. Arboretum research combines both short-term and long-term observational studies and experiments.

**Conservation:** To conduct wise conservation and management practices, as we protect and enhance the biological diversity of this unique natural area.

**Collections:** To maintain, develop, and interpret well-documented plant collections for teaching, research, public education, and enjoyment.

**Recreation:** To provide a place where people from the College at Geneseo and the Geneseo community may enjoy passive recreation and where they may come to learn, reflect, and renew themselves through contact with the natural world. The Arboretum enhances the quality of life, both for the College and the citizens of the Geneseo region.

## Arboretum Walks - Saturdays at 2:00 PM. Meet in Gazebo

March 4, 2000	Winter Adaptations, "Kids Walk" (kids < 12 yrs should be accompanied by an older friend)
April 1, 2000	Migration and the Signs of Spring, "Family Outing"
April 15, 2000	Changes in the Land, "For the Older Crowd"
May 6, 2000	Secrets in the Arboretum, "Kids Walk" (children 3-8 with bigger friends).



**Friends of  
The Roemer Arboretum**

Please renew my annual membership in the friends of the Roemer Arboretum. My \$25 membership contribution is enclosed.

Name \_\_\_\_\_

Address \_\_\_\_\_

Email: \_\_\_\_\_

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make checks payable to Geneseo Foundation/Roemer Arboretum