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Integrating Ecology and Information Technology: Conserving Natural Resources

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Integrating Ecology and Information Technology: Conserving Natural Resources

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Final Report

Goals

The goal of this project is to develop an interdisciplinary collaboration in technology, spatial analysis and the conservation of natural, environmental, and ecological resources. The proposed collaboration involved independent research projects so that students can participate in both field-based and laboratory activities. The Thinkfinity project has initiated continued work and expansion of our goals to include a multi-college collaboration and possibilities for outside funding (NSF).

Accomplished Objectives

Research and Collaborations

- Research focus changed from the Hudson Highlands to Rockefeller Preserve. We are currently deploying cameras and collecting data within the two Rockefeller Properties.
- We are working on expanding the study zone to the Pocantico Watershed (contains both the Rockefeller parks and the Pleasantville Campus).
- We are also working on an NSF Grant Proposal to fund expansion to New York State Parks – this will involve collaborations that are currently developing with the New York State Museum, and 4-5 colleges in New York State. The current college consortium includes (Pace University, Hofstra University and Ithica College).
- In conjunction with the New York State Museum, we have begun to develop a database (housed within the Seidenberg School) as a data warehouse/repository.
- The research group (faculty and students), participated in a camera trapping field training session with Dr. Roland Kays, Curator of Mammals, New York State Museum.

Interdisciplinary Instructional Activities

- As part of the instructional activities of the grant, a number of student projects have been initiated using our base research technique – remote camera trapping. Undergraduate students are enrolled in a required research class; graduate students are conducting research for their thesis. The research group meets regularly (sometimes in the field) to discuss data collection, analysis, and field techniques. Below are the students, course numbers and projects that the students are working on:

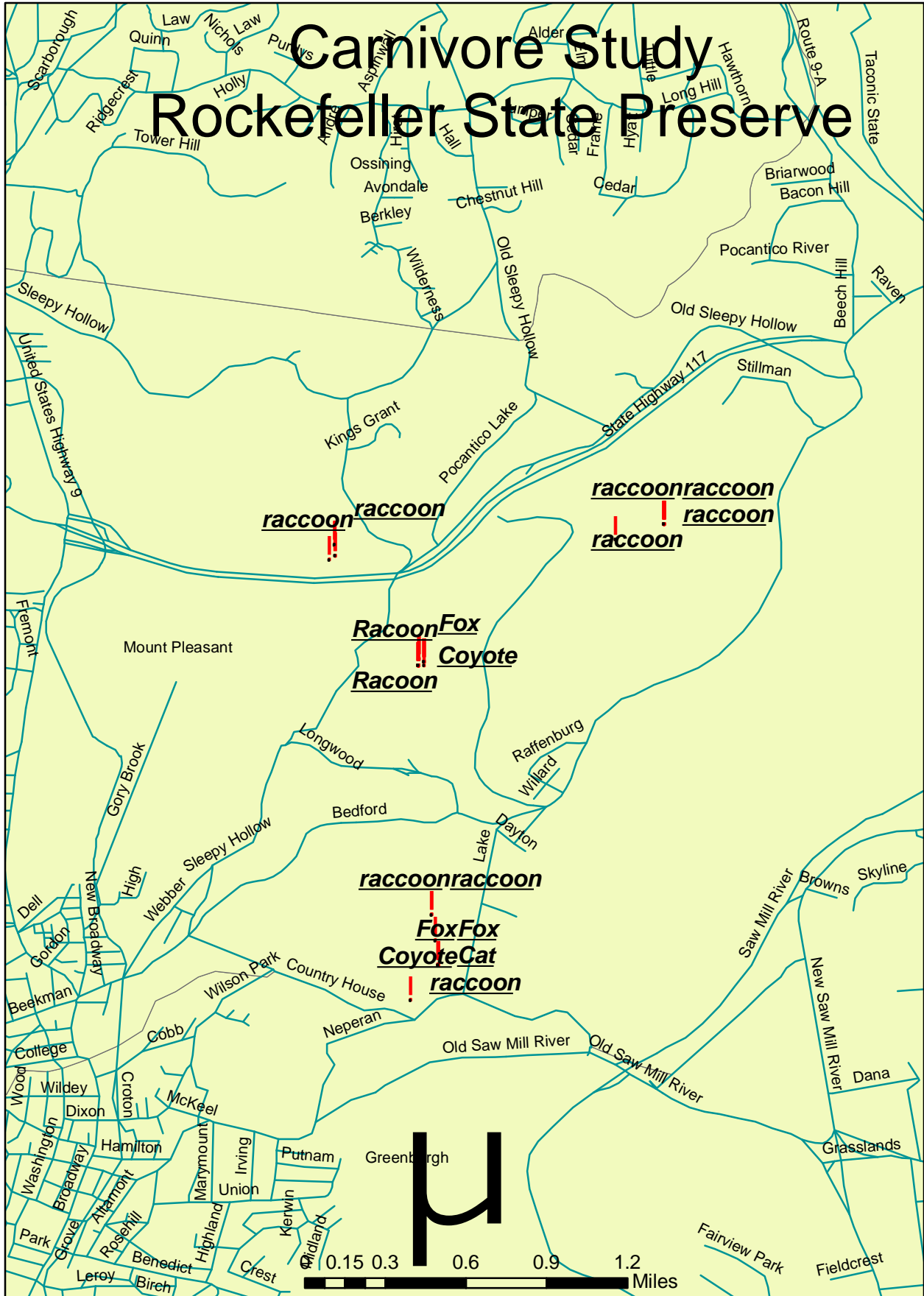
- David Spillo ENS 792 (Carnivore census, Rockefeller State Park)
- Marnie Miller-Keas ENS 792 (Carnivore census, Rockefeller State Park)
- Theresa Pellecchia ENS 792 (Feral cat monitoring in Jones Beach)
- Joseph Trynosky ENS 792 (Rat density estimation, NYC)
- Charles Johnson Bio 480 (Carnivore census, Rockefeller State Park)
- Gina Squillante Bio 480 (Carnivore census, Rockefeller State Park)
- Dawn Belotti Bio 480 (Feral cat monitoring, Jones Beach State)
- Alisha Acecedo Bio 480 (Carnivore census, Rockefeller State Park)

Publications

The research group is beginning to disseminate some of their findings. This will ramp up as more data is collected. It is anticipated that there will be a number of conference presentations in Fall, 2010.

- Johnson, C., Alvarado, K., Squillante, G., Spillo, D., Farkas, D., and M. Grigione. *Monitoring sensitive species in Westchester County with Integrated GIS*. Eastern Colleges Science Conference, Pleasantville, New York. April 2010.

Carnivore Study Rockefeller State Preserve



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