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Applying Information Technology in the Identification of Areas of Conservation Importance: Rare Carnivores in Westchester County, New York

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Applying Information Technology in the Identification of areas of conservation importance: Rare carnivores in Westchester County, New York

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Abstract

This study will use a variety of information technology and informatics techniques to investigate areas of conservation value by studying the movement of mammalian carnivores within and among selected research sites near the Pleasantville Campus in Westchester County. Carnivores will be studied using non-invasive motion-triggered cameras. Data collection and analysis will employ database technology to store images, GIS to analyze spatial relationships, and results will be made available through a web-based portal. Results from this study will enable policy makers to make informed decisions regarding best management practices for predators.

Status Report

After securing a graduate student in the Graduate Environmental Science Program, we were able to get permission to conduct research on two of the potential properties (Campfire Club and Con Edison Corridor). Because of the size of the properties (Con Edison is a 113 mile power line corridor), we will limit the study to these two properties. The graduate student is currently working on the strategy for camera placement, which is set to begin in early June.

The process of surveying the properties, meeting with property managers, and securing permissions was conducted throughout the Spring 2013 semester. See details below.

Next Steps

- Begin the process of camera placement. This involves a research strategy that requires moving camera locations on a periodic basis. This will allow statistical analysis to generalize to the entire study area.
- Build GIS Models
- Start Web-site development

Revisions to project goals

Limit Study areas to Campfire Club property and Con Edison Corridor



Grant and project progress

<u>January</u>

- Jan 23rd: Initial meeting with graduate student (Dwane Binns).
- Jan 29th: ongoing meeting with graduate student to discuss thesis details

February

- Feb 6th: initial contact is made with Campfire club about possible studies on property
- Feb 7th: first contact is made with Con Edison about potential study
- Feb 24th: In person meeting between Pace representatives (Prof. Robinson and Prof. Grigione) and Campfire club personnel to discuss study details and possible funding
- Feb 26th: Received shipment of primary lot of cameras needed for Campfire/Con Edison right of way study

<u>March</u>

 March 14th: Meeting with Con Edison (Prof. Grigione, Dwane Binns & Prof. Robinson) to discuss scope of study and legal reservations

<u>April</u>

• April 23rd: Meeting between Dwane Binns and Dan Trotta (Campfire Club caretaker) to visually inspect Campfire grounds for possible camera trapping locations

<u>May</u>

- May 14-17 : prospective date of camera placement at campfire club grounds
- May 13: site visit by Dwane Binns with Con Ed personnel to assess treatment areas

<u>June</u>

• June 1st : prospective date of first camera placements on Con Ed right of ways