EYES IN THE FOREST: THE NATURESPY WILDLIFE MONITORING SYSTEM. ***P. Plummer****, E. Mueller, P. Shipman*, M. Osier, G. Skuse and J. Younker, Department of Biology, pjp2680@rit.edu, passbi@rit.edu*

With several vertebrate populations in decline worldwide, and an ever-dwindling number of skilled taxonomists having the ability to characterize such problems, the need has arisen for a simple and efficient method of surveying for and identifying vertebrate species. Through the development of wireless web camera technology, there has been an influx of consumer products which can be modified and integrated into traditional and modern field methodologies, potentially reducing errors and issues that often arise as a result of the sole dependency upon direct observations by humans. In our study, we have developed such a system, using wireless webserver cameras, which can act as our eyes in the field. Our camera is supported by a central server, running in a LAMP (Linux, Apache, MySQL, Perl) configuration. The camera communicates data to the server via e-mail messages, which are parsed and entered into a MySQL database on the server by a Perl filter. From this database, an interface can be run by a user to identify the contents of the images that are captured by the camera. Through our deployment and maintenance of this system, we hope to prove that it is an effective and efficient means of gathering and analyzing vertebrate population data.