



The Landscape Change Program



A DIGITAL ARCHIVE OF HISTORIC AND CURRENT PHOTO PAIRS, EDUCATIONAL RESOURCES, AND MORE

VERMONT STUDENTS GATHER DIGITAL IMAGES OF HUMAN-INDUCED LANDSCAPE CHANGE

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K-16 students are creating a web-based archive of historical and modern photograph pairs documenting 150 years of human interaction with the Vermont landscape: <http://www.uvm.edu/perkins/landscape>. Students learn how to use GPS, a digital camera, and computer imaging equipment as part of ongoing research to document change in the Vermont landscape from the mid-1800s to the present. University geologists introduce high school students to the geomorphology and the settlement history of Vermont. High school teachers, with the aid of student and teacher manuals we have prepared, lead students through the research process and focus classroom study on interdisciplinary concepts related to environmental science and human-induced landscape change of their local areas. Two pilot classrooms participated in the spring of 2000. We received data from >30 locations in 8 Vermont towns. Historical photographs were collected from as early as 1850s and as late as 1998. Interviews, libraries, and historical societies were used by students to determine the ages and locations of the historical photos. Geo-referencing of each site required each student to use a GPS and learn the concept of latitude and longitude. Students used a digital camera to record modern images on disk. The historical photos were scanned to an iMac computer provided by us. Most schools use an IBM compatible interface, so it was useful for them to get experience using a Macintosh. Students were introduced to word-processing and image manipulation as they produced paper poster presentations of their findings. Students also provided digital images and text files that we published as an individual page in our web database. Problems with the data collection included erroneous use of the GPS, receipt of paper deliverables instead of digital images, and images that did not show 'landscapes'. At least 16 more schools will participate during the 2000-2001 school year.

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