

LANDSCAPE METAMORPHISM IN VERMONT: BUILDING AN IMAGE ARCHIVE OF THE PAST AND PRESENT WITH STUDENTS, HISTORICAL SOCIETIES, AND TOWNS

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With funding from the National Science Foundation (NSF), we digitally archive historic and modern images of Vermont that document 150 years of human and natural physical landscape change. Building on our previous efforts with high school students and teachers, we now involve community members from historical societies, town offices, libraries, and extend our research opportunities to middle school and college students.

Students partner with community members to mine collections of historical images depicting landscapes near their homes, reference these landscapes geo-spatially, photograph the modern landscape conditions, and interpret landscape change in the field and in writing. Students integrate studies of the geologic and settlement history of Vermont with landscape analysis field work and aerial photo interpretation to understand the physical changes to their communities as depicted in the historic/current photo pairs.

We preserve all elements of the project digitally in an on-line archive (<http://geology.uvm.edu/landscape>). The image collection is enhanced with pedagogical tools including example curricula, teacher and student manuals, and educational tips for implementing historical research with students. We incorporate "place-based" educational models and link activities to the Vermont Framework of Standards and Learning Opportunities.

Students and their community partners submit all materials electronically via an on-line form. This web-based template allows broader participation state-wide and streamlines archive creation. Historic and modern image pairs and their associated metadata are stored in the Perkins Geology Museum's larger digital archive at the University of Vermont (<http://www.uvm.edu/perkins/>). Our archiving protocol includes capturing images at high resolution and generating web pages as users access the database.