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In introducing students to GIS technologies, I like to use exciting topics to pique interest. In the past, I've employed satellite imagery to delineate deforestation in the Amazon Forest in Brazil. However, reforestation can also occur in areas where housing developments take over farmland. I wanted to evaluate historical aerial imagery against current satellite imagery to determine if this phenomenon was occurring in Chester County.

The current multispectral image was purchased LAND INFO Worldwide Mapping, LLC and is a GeoEye-1 (50cm) Archive Satellite Imagery from December 3, 2012.

For the historical imagery, I contacted the Delaware Valley Regional Planning Commission (DVRPC) in Philadelphia. The commission serves as a planning consortium for governmental agencies in the Philadelphia region and maintains regional GIS data including historical aerial imagery for the counties they serve.

While the commission maintains aerial imagery, most is in the form of scanned Tiff rasters missing spatial references. I was able to obtain 1970 and 1975 imagery for free on the condition that I submit the georeferenced work to the commission. This should prove to be a fruitful addition to the project as it will be assigned to students tasked with important GIS work. As a result, DVRPC will be able to make the georeferenced imagery available to the public.

Sample Example:

December 2012



1975

