

# A Geospatial Career of 50 years with more than 500 Maps & GIS Projects

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**Keywords:** Academic cartography, map design, education, museum, thematic cartography, cartographic generalization

**Abstract:**

This presentation will analyse the use of maps and GIS in academic projects over the past 50 years. This cartographic journey started in 1975 at SUNY Albany (Sea Grant Atlases), to Michigan State and Oregon State Universities (both as a teaching and research assistant), to contract cartographic work for the US Forest Service, to University of Maryland (Director of the Cartographic Lab), to NOAA (aeronautical chart revision), to contract cartographic work for Woods Hole Oceanographic Institution (*Georges Bank* atlas project), to teaching at Montgomery College, and spending the last 39 years at the Smithsonian on as scientific support on GIS projects and maps for research, exhibits, articles, and books. So, this discussion will present published maps and GIS on display that provided the opportunity to educate the public on a variety of themes (oceanography, biogeography, history, paleobiology, geomorphology and geology, environment, history, human origins, art, and ancient cultures). These maps were prepared in several different formats: pen and ink, to scribe and peelcoat, to digital. Maps are often generalized from which readers and museum visitors can glean spatial information as they peruse the maps; but detailed maps require readers and visitors to stop and study so that more can be learned; and interactive maps, story maps, and GIS are utilized to provide readers with more complete spatial information. Maps and GIS help us navigate geographic relationships discussed in books, articles, monographs, and exhibits, but they can also be abstractions, as teaching tools of relationships or interactions over time. At the basic level, cartographic displays provide geographic context to collections and photographs within the body of a publication and an exhibit. While at the same time, the maps cannot be distractions; rather, they must add to and enhance the learning experience for readers and museum visitors.

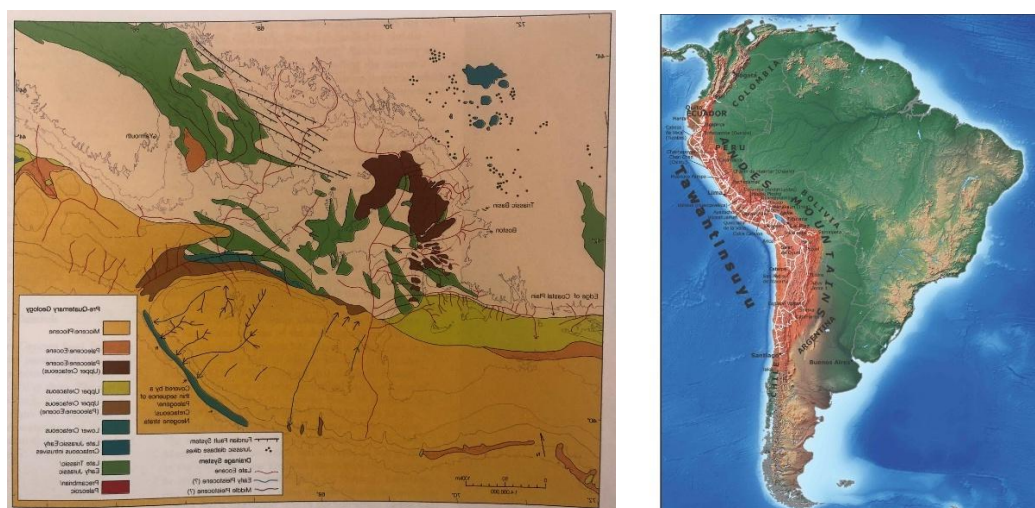


Figure 1. Example maps from the *Georges Bank* atlas, left, and the *Great Inka Roads* book and exhibit, right.

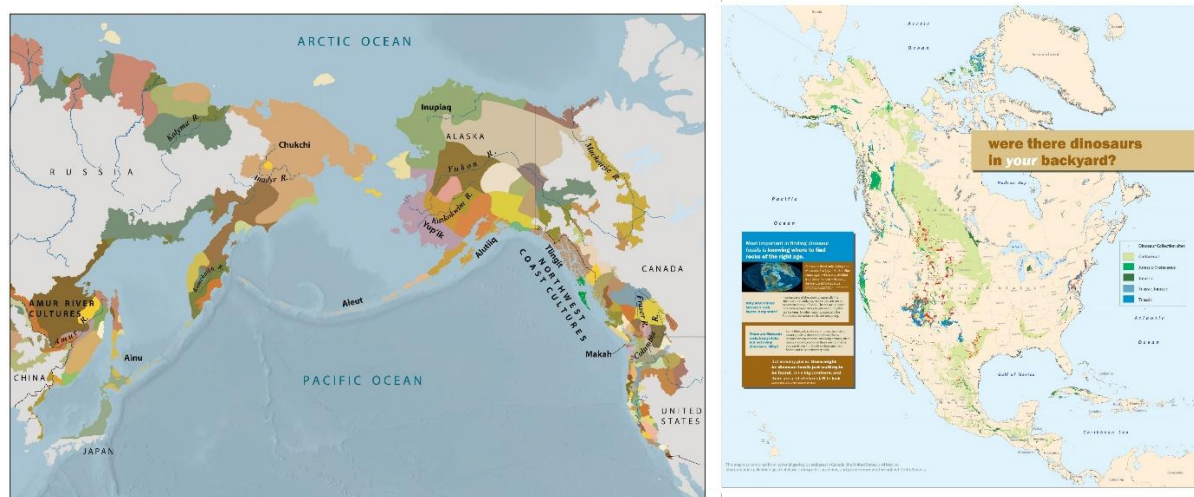


Figure 2. Example maps from the *Oceans Hall*, left, and the *Deep Time* exhibit, right.

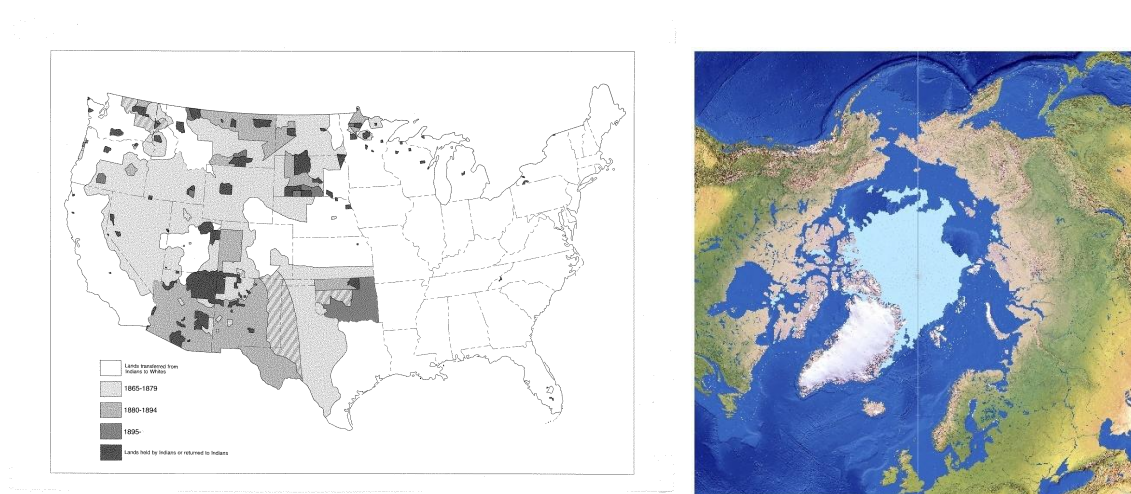


Figure 3. Example maps from the *Handbook of North American Indians*, left, and the *Narwhal, Inuit and Ice* exhibit, right.