TECTONICS

The overall goal of my research is to develop a comprehensive model for the tectonic evolution of the Northern Appalachians. Some of my research has tested models that were, at one time or another, in favor among regional geologists. I am scientifically conservative, publishing my own models only when I think there is overwhelming evidence for them. An early attempt cited below met this standard in 1993 but has been supplanted by more than 20 years of further research in the orogen. Evidence is accumulating for a more modern model that will be published soon.

Post-Taconian—Salinic transition (after Ludman et al., 1999)

Work in the past few years in eastern Maine has revealed far more complex deformation than previously thought, including thrusts and multiple folding episodes resulting in dramatic crustal shortening. Newly discovered structures are apparently on strike with mid-coastal Maine features proposed by Tucker et al (2001) shown here. Work continues to test this correlation.


