

Contacts are the planar boundaries between adjacent rock formations. These are depicted using solid black lines. Faults are depicted using somewhat heavier solid black lines along with symbols that show the direction of offset and nature of the fault. The attitude of bedding and other planar features is indicated using the **strike and dip** symbol. If strata are not horizontal, then there exists a line created by the intersection of the dipping stratum or fault plane

and an imaginary horizontal plane (figure 13.3). The azimuth of the line of intersection is the strike direction. Dip is the angle of tilt below the imaginary horizontal plane oriented 90° to strike in the direction in which the beds are inclined.

Geological maps have great practical significance. Indeed, the first geological maps were constructed by William "Strata" Smith to expedite the construction of coal canals in early nineteenth cen-

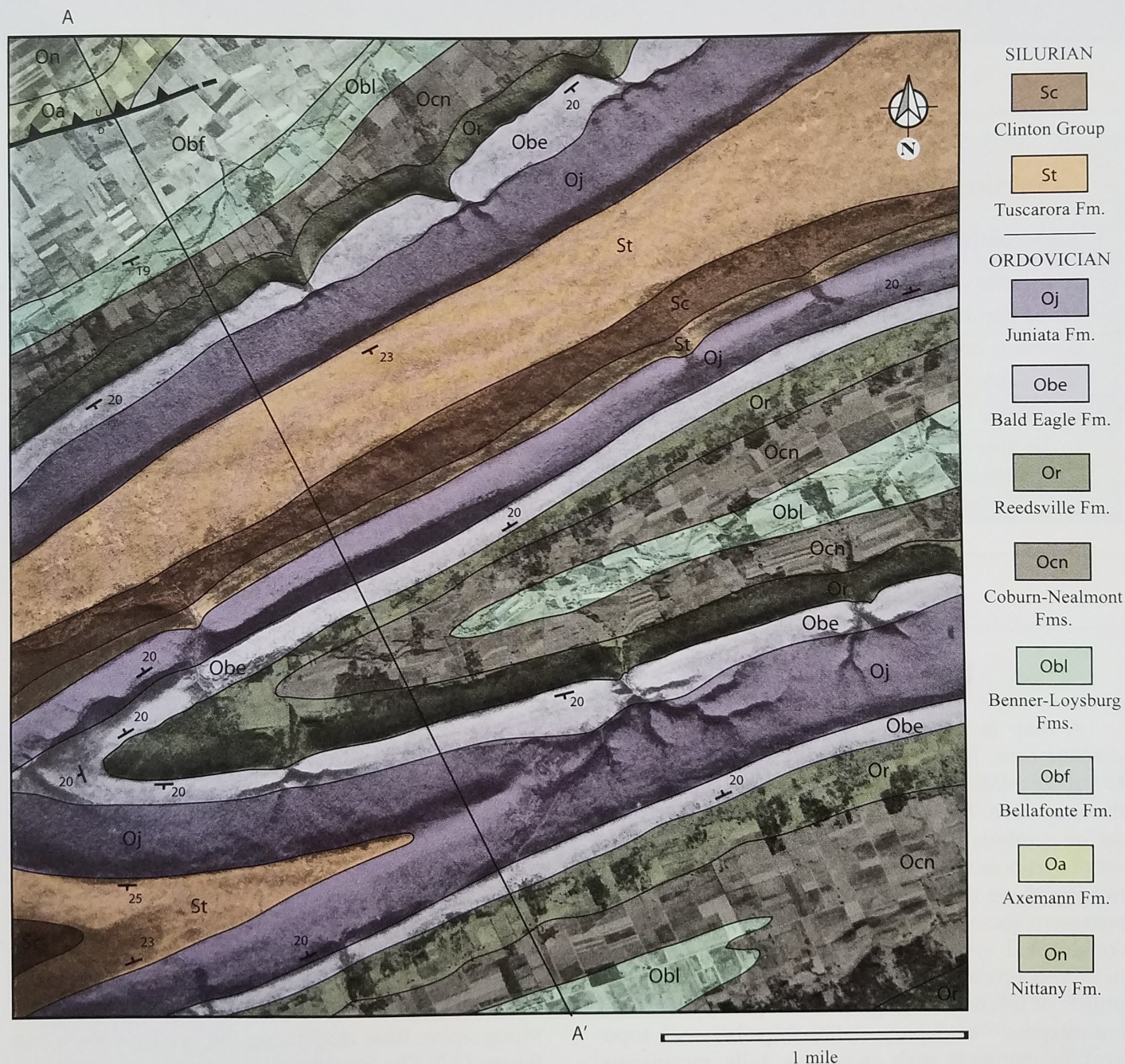


FIGURE 13.1

Geological map of the Mill Hall region of Pennsylvania showing the relationship of geology and topography.