

Figure 3. Map showing approximate locations of fault-exposition trenches in the English Hill area. Light blue areas are ponds. Trench profiles identified below portray only segments within the trenches that show structurally significant geology. Contour interval 10 ft. Original topography has been considerably modified. In a result, elevations shown in trench profiles are elevations shown in trench profiles are approximate.

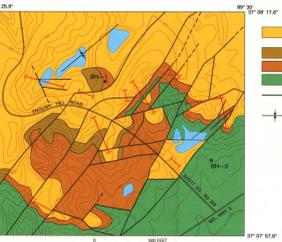


Figure 4. Map showing generalized geologic units and structures for the trench profile of the English Hill area. Also shown are the approximate locations of the fault-exposition trenches. Contour interval 10 ft. Original topography has been considerably modified. In a result, elevations shown in trench profiles are approximate.

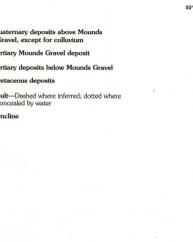


Figure 26. Map of the English Hill area showing where the Porters Creek Clay (Tpc) is absent (shaded), being removed by pre-Wilcox Group erosion. Also shown for reference are trench locations. Trench profiles (shaded below) portray only segments within the trenches that show structurally significant geology.

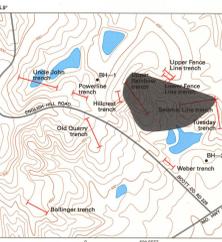


Figure 28. Map of the English Hill area showing where the Mounds Gravel (Tmg) is absent (shaded), being removed by pre-Wilcox Group erosion. Also shown for reference are trench locations. Trench profiles (shaded below) portray only segments within the trenches that show structurally significant geology.

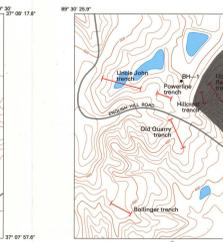


Figure 29. Map of the English Hill area showing where the Sangamon Gravel (Dsg) is absent (shaded), being removed by pre-Wilcox Group erosion. Also shown for reference are trench locations. Trench profiles (shaded below) portray only segments within the trenches that show structurally significant geology.

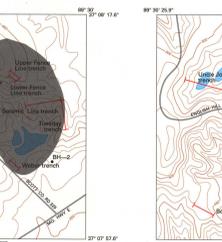
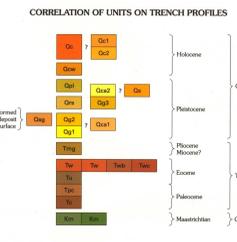


Figure 31. Map of the English Hill area showing where the Upper Quaternary (Uq) is absent (shaded), being removed by pre-Wilcox Group erosion. Also shown for reference are trench locations. Trench profiles (shaded below) portray only segments within the trenches that show structurally significant geology.



CORRELATION OF UNITS IN TRENCH PROFILES

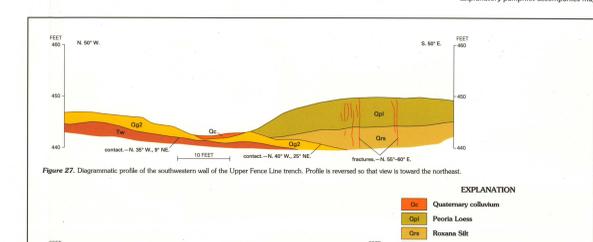


Figure 27. Diagrammatic profile of the southwestern wall of the Upper Fence Line Trench. Profile is reversed so that view is toward the northeast.

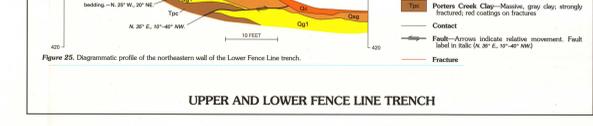


Figure 25. Diagrammatic profile of the northeastern wall of the Lower Fence Line Trench.

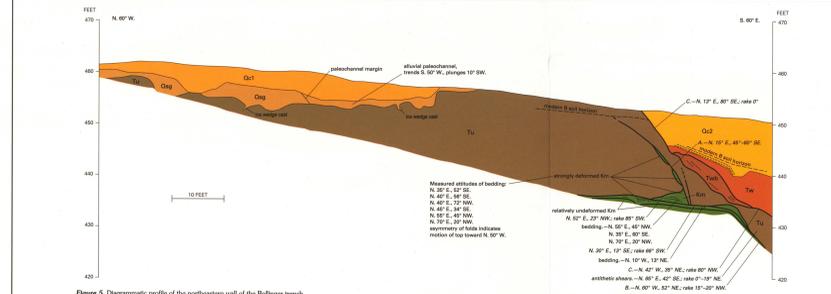


Figure 5. Diagrammatic profile of the northeastern wall of the Bollinger trench.

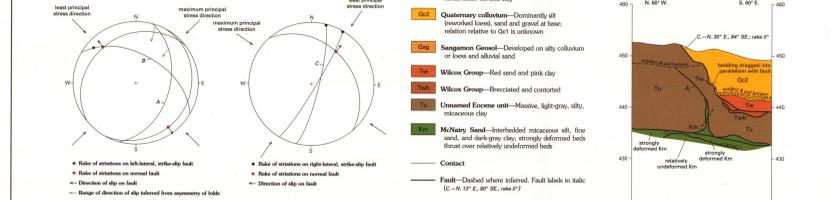


Figure 7. Stereographic projections of structural data from the Bollinger trench. Faults are plotted as great circles with strike-slip faults as great circles and normal faults as arcs. Data for deeper (shaded) bedding in this trench. B. Data for upper (unshaded) bedding in this trench. Note the opposite sense for interpreted principal stress directions.

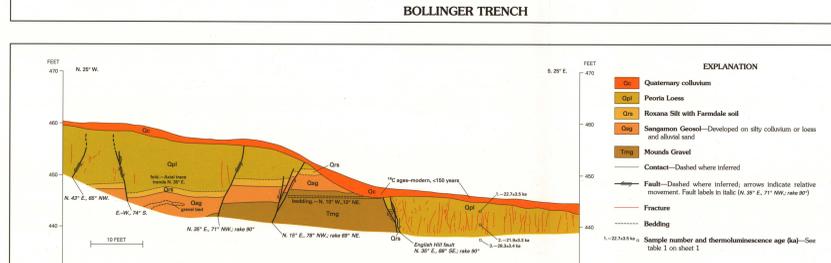


Figure 6. Diagrammatic profile of the southwestern wall of the Bollinger trench. Profile is reversed so that view is toward the northeast.

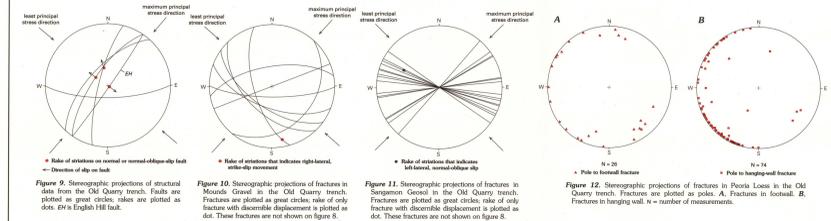


Figure 8. Diagrammatic profile of the northeastern wall of the Old Quarry trench.

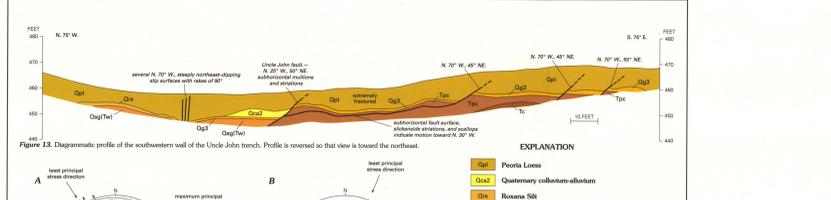


Figure 10. Stereographic projections of structural data from the Old Quarry trench. Faults are plotted as great circles, strike-slip faults as great circles, and normal faults as arcs. Data for deeper (shaded) bedding in this trench. B. Data for upper (unshaded) bedding in this trench. Note the opposite sense for interpreted principal stress directions.

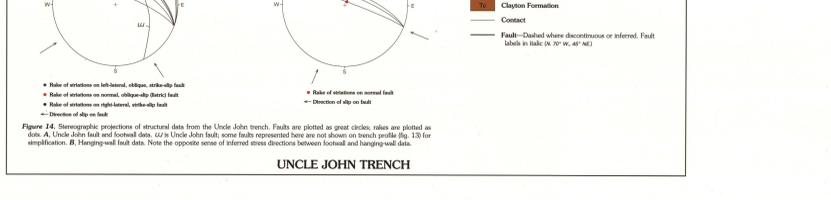


Figure 13. Diagrammatic profile of the southwestern wall of the Uncle John trench. Profile is reversed so that view is toward the northeast.



Figure 14. Stereographic projections of structural data from the Uncle John trench. Faults are plotted as great circles, strike-slip faults as great circles, and normal faults as arcs. Data for deeper (shaded) bedding in this trench. B. Data for upper (unshaded) bedding in this trench. Note the opposite sense for interpreted principal stress directions.



Figure 15. Diagrammatic profile of the southwestern wall of the Powerline trench.



Figure 16. Stereographic projections of structural data from the Powerline trench. Faults are plotted as great circles, strike-slip faults as great circles, and normal faults as arcs.

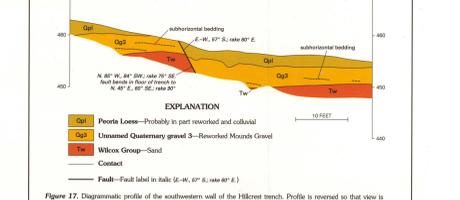


Figure 17. Diagrammatic profile of the southwestern wall of the Hillcrest trench. Profile is reversed so that view is toward the northeast.

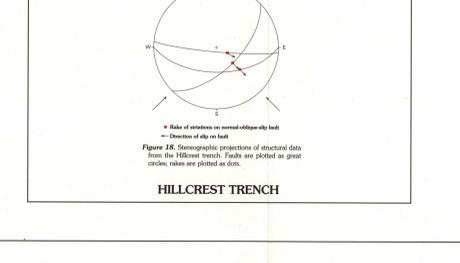


Figure 18. Stereographic projections of structural data from the Hillcrest trench. Faults are plotted as great circles, strike-slip faults as great circles, and normal faults as arcs.

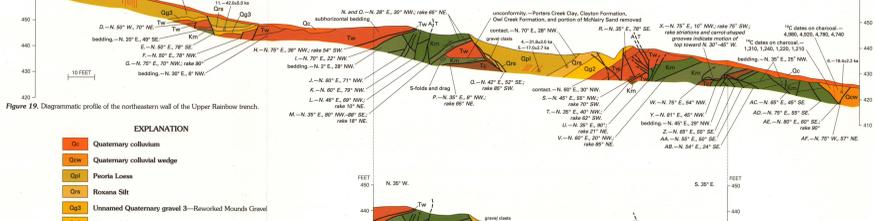


Figure 19. Diagrammatic profile of the northeastern wall of the Upper Rainbow trench.

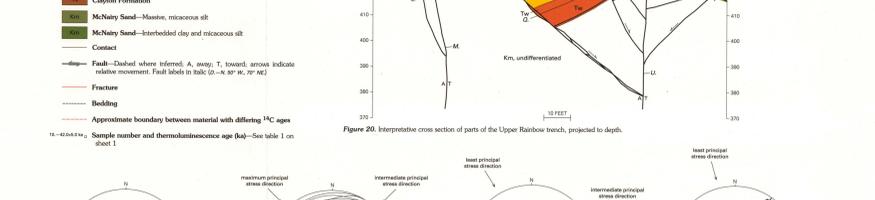


Figure 21. Stereographic projections of structural data from the Upper Rainbow trench for episode 3. Faults are plotted as great circles.

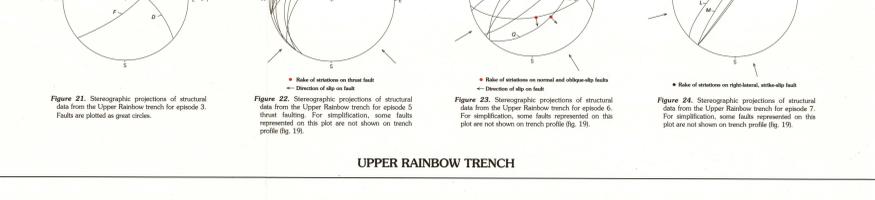


Figure 20. Interpretive cross section of parts of the Upper Rainbow trench, projected to depth.



Figure 22. Stereographic projections of structural data from the Upper Rainbow trench for episode 5. Faults are plotted as great circles. For simplification, some faults represented on this plot are not shown on trench profile (Fig. 19).

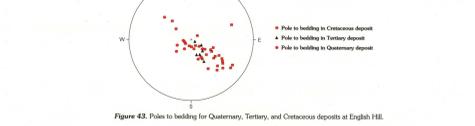


Figure 36. Stereographic projections of poles to faults in the Tuesday trench.

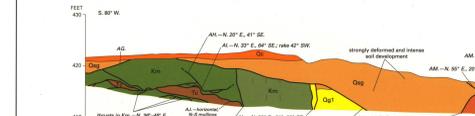


Figure 37. Stereographic projections of structural data from the Tuesday trench for episode 7. For simplification, some faults represented on this plot are not shown on trench profile (Fig. 35).

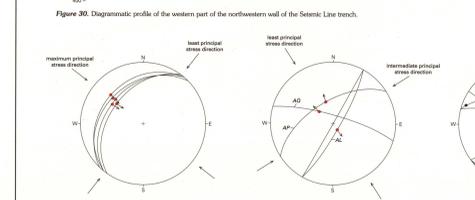


Figure 38. Stereographic projections of structural data from the Tuesday trench for episode 8. For simplification, some faults represented on this plot are not shown on trench profile (Fig. 35).

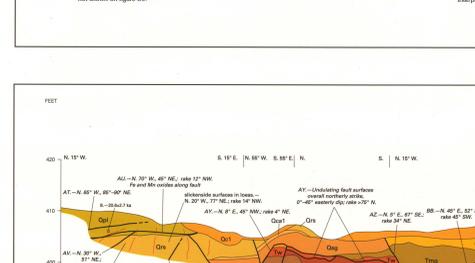


Figure 39. Stereographic projections of structural data from the Tuesday trench for episode 9. For simplification, some faults represented on this plot are not shown on trench profile (Fig. 35).

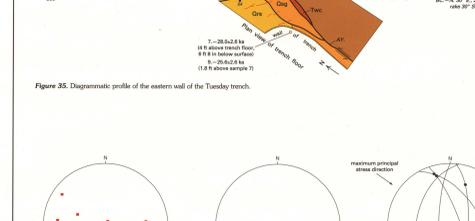


Figure 35. Diagrammatic profile of the eastern wall of the Tuesday trench.

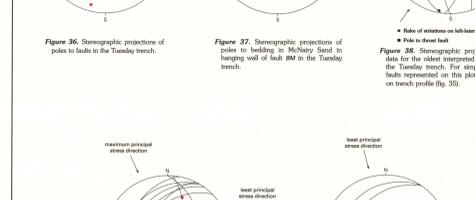


Figure 40. Stereographic projections of structural data from the Tuesday trench for episode 10. For simplification, some faults represented on this plot are not shown on trench profile (Fig. 35).

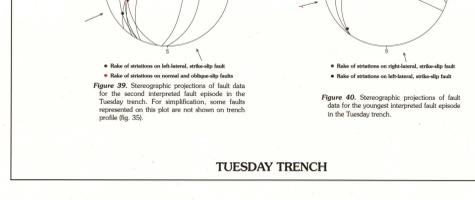


Figure 41. Diagrammatic profile of the southwestern wall of the Weber trench. Profile is reversed so that view is toward the northeast.



Figure 42. Stereographic projections of structural data from the Weber trench.

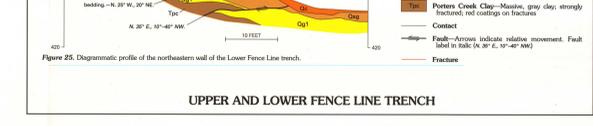


Figure 34. Basal model of right strike-shear for strike-slip faults from the Seneca Line trench. Principal sense of displacement (P2D) is N. 55° E.

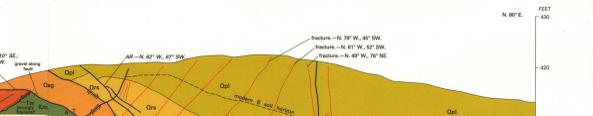


Figure 32. Stereographic projections of structural data for strike-slip faults exposed in the Seneca Line trench. Orientations are not shown on Figure 31.

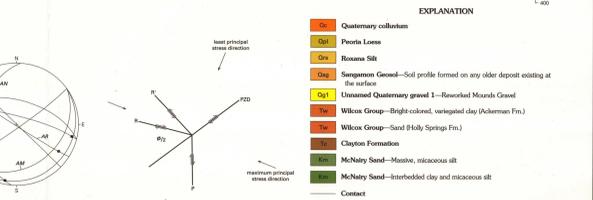


Figure 33. Stereographic projections of structural data for normal faults exposed in the Seneca Line trench. See Figure 34 for interpretation of stress directions.

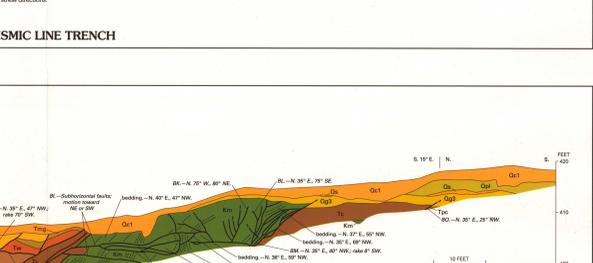


Figure 30. Diagrammatic profile of the western part of the northwestern wall of the Seneca Line trench.

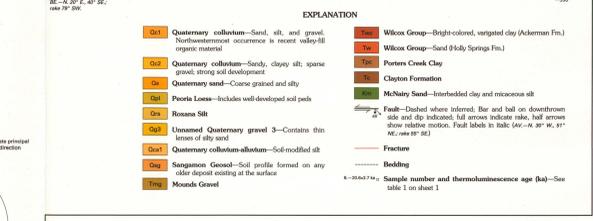


Figure 31. Stereographic projections of structural data from the Seneca Line trench. Orientations are not shown on Figure 30.

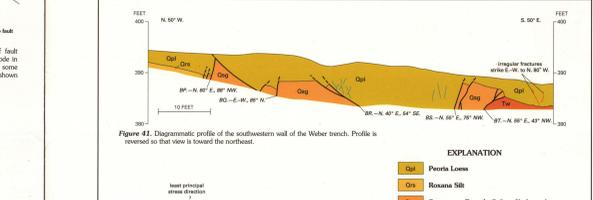


Figure 35. Diagrammatic profile of the northeastern wall of the Tuesday trench.

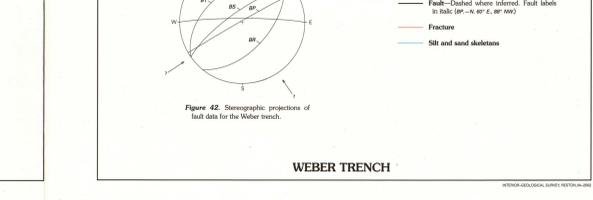


Figure 36. Stereographic projections of structural data from the Tuesday trench. For simplification, some faults represented on this plot are not shown on trench profile (Fig. 35).



Figure 41. Diagrammatic profile of the southwestern wall of the Weber trench. Profile is reversed so that view is toward the northeast.

GEOLOGIC MAP OF THE SCOTT CITY 7.5-MINUTE QUADRANGLE, SCOTT AND CAPE GIRARDEAU COUNTIES, MISSOURI

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