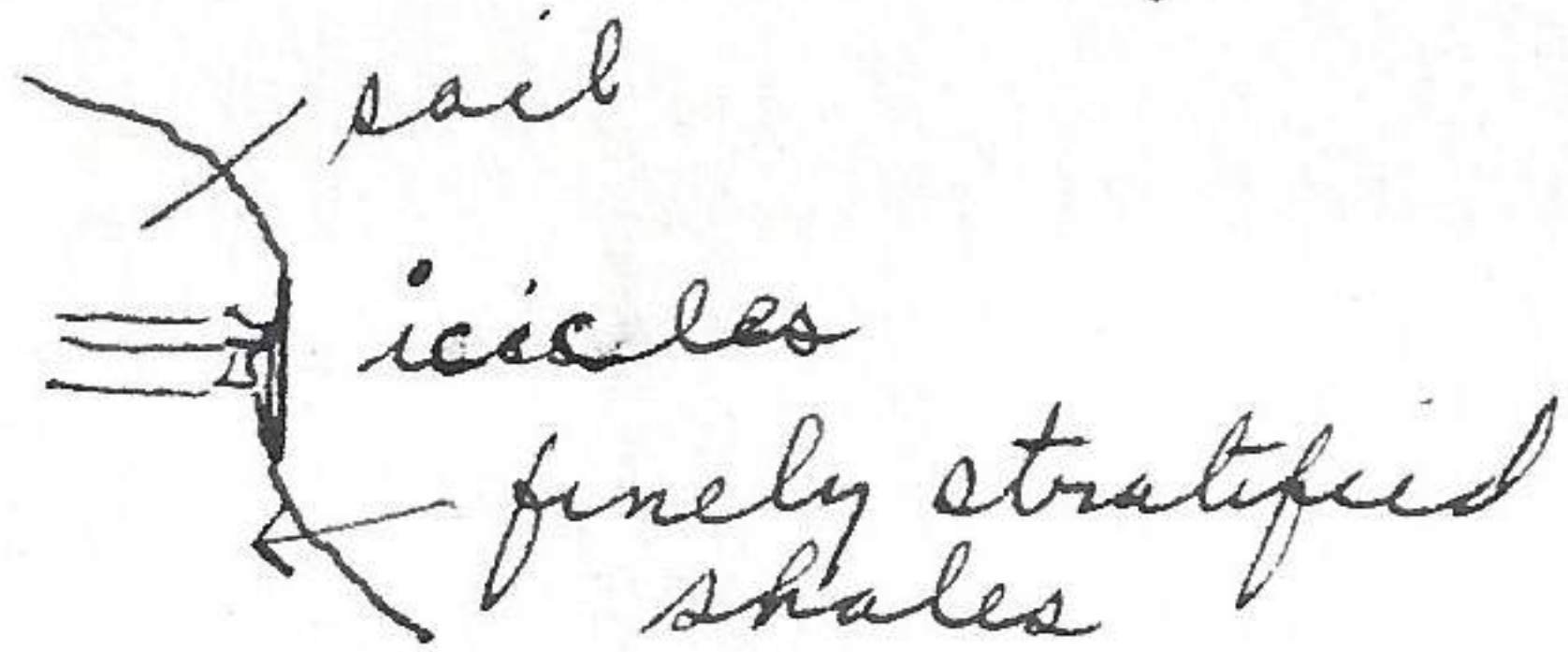


soils. water from thick shale layer and soil above formed



4 feet long icicles. No water in drainage. 4 juncos (slate colored) 2 titmice, redtail. 2:00 stopped at gravel bar. Good population dead shells. Left 2:21 2:22

5 cardinals, 15 slate-colored juncos, 3 black-capped chickadees. This river at this point is like the Wabamun with extensive bank slippage. 2:25 drainage left. 8 gal per second. Below drainage (in center of main river) 5 large fish churned the water and chased other fish in several directions. Redbellied woodpecker. 2:35 20 tree sparrows, 3 song sparrows, 10 slate-colored juncos, 3 chickadees, 2 cardinals. 2:38 two crows flying up river and diverted flight into tree at edge of water where a great horned owl was sitting in a tree. They remained in same position & called. At the same time 2 redtails flew out over river and one knocked the other into the water from which it immediately left and flew back into tree. A third redtail continued to sail over head in the same area. As I approached the owl left down stream followed by the 2 crows. One redtail remained in trees until I was about 100' from the bend at which time it left. There were no nests in any of the trees. 3 mallards flew up stream about 100' ahead. 2:40 24 mallards of about equal sexes alighted in river at bend just n. There is large ice blocks on bank at what would be the upper flood level of this season but does not appear to be as prevalent as in lower stretches of the Delaware river. 35 slate-colored juncos. These are about the only herds using the banks slopes. 2:45 2 redbellied woodpeckers, 2 bluejays. Some light snow in air. 2:48 drainage right, 1 gal per 2 seconds. 2:52 drainage right, 1 gal per sec. downy & redbellied woodpecker. Bend 2:55, cardinal singing. Usual downed trees from bank erosion, along route. Coyote tracks in snail on bank. Raccoon tracks most common and then only about 1 set per 200'. They are relatively uncommon in this area although conditions are favorable. 3:01 bend of river. ♂ & ♀ mallard, 3:13 2 redbellied woodpeckers. 3:15 bend 2 redtails made aerial contact. 8 ♂ & 5 ♀ mallards