

CONCLUSIONS: According to the close similarity in numbers of right and left valves of Anodonta grandis and Lampsilis radiata silequoidea taken, it can be assumed that the collected specimens represent a similar population of whole unionids, that is, two shells represent one unionid organism.

As can be seen in the table, length of shell has little to do with its relative abundance as have area or depth:area little importance in determination of abundance of <sup>a</sup>species. There seems to be a trend toward greater variation in length as the number of a species increases, but this may simply be a sampling phenomenon.

The age distribution curves for the six most abundant, measured species are skewed to the right, indicating more older members of the population than young. The curve for Quadrula quadrula is fairly well centered, perhaps because more live specimens were collected for this species than the others. However, Ligumia subrostrata's curve is almost perfectly centered, but no live specimens were collected. Either these first four curves indicate a normal distribution for the live population or, more probably, the sampling factor -- the character of the shell (resistance to erosion, availability for transportation by the stream and depositional characteristics). An absence of young members in the curve might also indicate that the young unionids are more likely to bury themselves into the bottom of the stream bed, thus making themselves unavailable for surface studies.

This was only the first step in correlating the actual living biome with the resulting fossil assemblage. Future studies would include digging into the stream bed to provide a complete collection of all the living unionids, having first compared this population with unionid populations at different points along the river course. Then a study of fossilized material in the Wakarusa Valley would be made. Such excavations are proceeding on the Wakarusa as the Army Corps of Engineers are straightening and diking the channel from