water may be more pallid. Thus it is tempting to speculate that graphic variation in the amount of fin pigment is genetically or phenotypically related to water color. I have tried to clarify this question by comparing water colors of 85 Pearl drainage collections of *N. roseipinnis* with that of 38 Mobile Bay and Pascagoula collections. To minimize variation water color information was extracted only from the field notes of R. D. Suttkus and J. S. Ramsey. These two men have worked together extensively in the field, and I assume that they judge and record water color similarly. Three classes of water color were recognized, white (=colorless), light brown (=slightly brown), and brown (=dark brown). For the combined Mobile Bay and Pascagoula drainages, the water colors for collections of *N. roseipinnis* were characterized as follows: 14 (37%) white, 8 (21%) light brown, and 16 (42%) brown. For the Pearl drainage, the values were 43 collections (50%) white, 9 (11%) light brown, and 33 (39%) brown. In spite of the limitations of such data, apparently Pearl drainage streams inhabited by *N. roseipinnis* do not have darker water than those streams in the Mobile Bay and Pascagoula drainages. On the contrary, Pearl drainage streams perhaps average lighter in color. Thus water color differences do not seem to explain the high fin pigmentation index of Pearl drainage *N. roseipinnis* as compared with Mobile Bay and Pascagoula populations.

As pointed out in the Description, the chin pigmentation of *N. roseipinnis* shows minor geographic variation. Minor geographic variation in tuberculation is also suggested in the Breeding Tuberculation section.

Arguments, some substantial, might be made for the recognition of subspecies in *N. roseipinnis*. In totality of meristic and morphometric characters, the Mississippi Valley populations differ decidedly from Gulf slope populations. However when considered individually, most of the differences are minor and overlap is broad. The most salient differences are in those three measurements that exhibit a "step" in the cline between the Lake Pontchartrain and Bayou Pierre systems (Table 15). For a point of separation between 245 and 246, the average divergence (Ginsburg, 1954) between the combined Mississippi Valley and combined Gulf slope populations in body depth is 94 percent. Average divergence for caudal peduncle depth is 91 percent for separation anywhere between 101 and 103. Average divergence for dorsal fin length is 83 percent anywhere between 219 and 222. (The data suggest that body depth and caudal peduncle depth are positively correlated, so that they are not properly considered as two independent characters. There is no apparent correlation between dorsal fin length and either depth measurement.) Although the northwestern populations act as the terminal element in clinal variation of these three characters, the magnitude of the