

species of *Lythrurus* has been found in the drainage, despite substantial collecting. No specimens have been examined from the Wolf or Tchoutacabouffa River systems, two minor basins in Hancock, Harrison, and Pearl River counties, Mississippi; but Cook (1959:122) records the species from both drainages.

In the Mississippi Valley, *N. roseipinnis* inhabits the Bayou Pierre, Big Black, and Yazoo drainages in Mississippi. Only three widely separated records are known from the latter system. I have recently been informed (R. C. Cashner, pers. comm.) that *N. roseipinnis* also is found in Coles Creek (Jefferson Co., Miss.), but I have not examined specimens.

Speculation on how this species gained entrance into Mississippi River tributaries must center around either stream capture or lowland transfer. Stream capture, if it has taken place, probably has been between the Pearl and the Bayou Pierre and/or Big Black drainages. This is suggested by the close approximation of these systems and the low relief of the divides between them. The fact that the Mississippi Valley range of the species is limited to three adjacent drainage systems also favors transfer by relatively localized stream capture somewhere in western Mississippi.

The Mississippi River has followed varying courses in its lower reaches as it deposited its extensive delta. The entire New Orleans-Lake Pontchartrain-Lake Borgne area is of recent origin, resulting from the settling and compacting of alluvium deposited when the River did not follow its present course. The Metairie-Mississippi River departed from its existing channel at about the town of Kenner (Jefferson Parish) and flowed east through what is now New Orleans toward Lake Borgne (Russell, 1936, 1940).

At this stage the mouth of the Mississippi River was very near the present mouth of the Pearl River. It seems probable that two such closely approximated rivers would have been interconnected from time to time by an ever-changing system of anastomosing tributaries, distributaries, and cut-off channels so characteristic of active deltas. Even if they were not directly connected, the water from the Metairie-Mississippi would have created a low-salinity bridge in the present-day Lake Pontchartrain-Lake Borgne area. These circumstances should have afforded ample opportunity for *N. roseipinnis* to move from the Pearl drainage into the Mississippi drainage via a lowland route.

The major difficulty with this hypothesis is the present-day distribution of *N. roseipinnis* in the Mississippi basin. If this species moved up the Mississippi, why is it now limited to three adjacent tributaries on one side of the river? Why is it absent from the Homochitto system in south-