

of the rays. In early stages dark streaks are present on the membrane along the posterior margin of the first several rays. With advanced development (either increasing size, increasing sexual development, or moving west in the range) these streaks darken; and in the anal fin they broaden to form lanceolate apical spots. In *N. b. bellus*, by contrast, incipient anal and pelvic fin bands begin development as isolated melanophores scattered randomly on the membranes at the margin of the fins. The number and density of these melanophores increases with advanced development.

N. roseipinnis is compared with *N. atrapiculus* in Tables 16 and 17 and in the Comparisons section under the latter species. *N. roseipinnis* is sympatric, occasionally syntopic, with *N. umbratilis* and *N. fumeus* in the Bayou Pierre, Big Black, and Yazoo drainages in western Mississippi and with the latter species in some tributaries of Lake Pontchartrain. It is readily distinguished from both by its fin pigmentation. *N. fumeus* has no interradiation fin pigment. The fins of male *N. umbratilis* become dusky only during the breeding season, and pigment is uniformly dispersed and forms no specific pattern. *N. roseipinnis* differs further from *N. umbratilis* in lacking an anterior basidorsal spot.

SEXUAL DIMORPHISM.—Sexual dimorphism in tuberculation, breeding coloration, and fin pigmentation have been discussed above. No sexual dimorphism in meristic characters was noted.

Sexual dimorphism in morphometric characters is summarized in Table 2. A sample of 43 breeding males and 25 breeding females from the Pascagoula River drainage was used for statistical comparison with Student's *t*-test. All specimens measured were 40-50 mm SL. Mean SL for both males and females was 44.16 mm. Levels of probability greater than 0.1 were considered not significant (ns). Following each character is given (first) the range and mean for males, (second) the range and mean for females, and (third) the probability that the two means are significantly different. Predorsal length: 535-573, 554.4; 532-578, 558.4; ns. Postdorsal length: 461-502, 475.9; 454-483, 468.1; <0.001. Prepelvic length: 459-497, 478.9; 474-509, 492.8; <0.001. Preanal length: 603-653, 634.6; 630-667, 645.8; <0.001. Head length: 224-251, 237.2; 223-261, 239.4; ns. Head depth: 154-174, 164.8; 150-179, 164.3; ns. Post-orbital head length: 90-112, 98.5; 92-105, 98.6; ns. Snout length: 63-77, 71.2; 66-78, 71.6; ns. Upper jaw length: 75-94, 85.1; 78-95, 86.1; ns. Gape width: 50-68, 58.3; 51-68, 57.2; ns. Fleishy orbit length: 67-80, 73.5; 66-83, 75.8; <0.01. Fleishy interorbital width: 80-94, 88.3; 80-94, 86.8; ns. Body depth: 201-251, 224.4; 192-274, 227.2; ns. Body width: 112-138, 127.6; 119-164, 139.6; <0.001. Caudal peduncle length: 193-237, 213.8; 183-225, 210.4; ns. Caudal peduncle depth: 90-109, 97.0; 79-100,