

being somewhat lighter than dusky intervening naked spaces, appear as light spots. Neither darkened scales nor chevron-shaped markings along myosepta developed in either sex. Bar markings absent and breeding males not melanistic.

Poorly defined dusky stripe present midlaterally on caudal peduncle. Stripe about one scale row wide posteriorly, weak to moderate in intensity, with ill-defined borders. Over and anterior to anal fin stripe broadens and fades abruptly. Occasionally midlateral trunk slightly more dusky than upper sides, but this rarely gives impression that lateral stripe extends forward to head. Usually no band across upper half of opercle. No discrete caudal spot present, though lateral stripe may broaden slightly over hypural plate. At midbody pigment usually extends one-half to two scale rows below lateral line, primarily along scale margins. Discrete punctulations above and below each lateral line pore usually absent. Melanophores weakly to moderately developed along anal fin base and in double row along ventral margin of caudal peduncle. Anterior basidorsal spot absent.

FIN PIGMENTATION.—Breeding adults form the basis of the following description. In non-breeding adults, and especially juveniles, the intensity and amount of fin pigment is reduced, but the basic patterns of deposition usually are discernible throughout most of the year.

Pigmentation of dorsal fin *intermediate* in most respects between that of *N. b. bellus* and *N. roseipinnis*. In breeding males, narrow, clear border along margin of fin. Broad, black, subtriangular band located immediately proximal. Melanin darkest and most extensive near apex of fin, in first two to three interradial membranes. Pigment weaker posteriorly, primarily developed in and about ray branches (Figs. 3C, 4E). Consequently, band narrows and fades posteriorly. Proximal to this band, interradial membranes lightly sprinkled with melanophores. In females, pattern of dorsal fin like that of males, but uniformly lighter.

Dark subtriangular blotch located subterminally at apex of anal fin of breeding males (Figs. 3C, 4F). It is broadest and darkest at tip of fin, formed by pigment on interradial membranes in and about ray branches. Blotch fades and narrows as interradial pigment is progressively reduced posteriorly. Posterior extent of pigment dependent on size; in small males, restricted primarily to apex of fin, extending posteriorly only to the second or third interradial membrane. Pattern in these cases superficially similar to that of *N. roseipinnis*. In large males interradial melanophores extend more posteriorly, occasionally to last membrane. Consequently apical blotch drawn out into subtriangular band lying subterminally along fin margin; such specimens superficially resemble *N. b. bellus*. Both Figs. 3C and 4F represent condition in moderately large males. Apical blotch or tapering band contrasts sharply with basal portion of fin, which may have few melanophores scattered along ray borders but usually lacks interradial pigment.

Anal fin pigment more weakly developed in females, occasionally invisible to unaided eye. Pattern like that of males, and extent of pigment varies with size. In small breeding females, melanophores present only at apex of fin in membranes 1 or 2, and occasionally interradial pigment entirely absent. Pigment spreads posteriorly with increasing size, occasionally to eighth interradial membrane.

All principal caudal rays bordered by melanophores in both sexes. In breeding males, some or all caudal interradial membranes may be dusted with pigment, especially near tips of lobes and at fork of fin. Rarely entire posterior margin of fin fringed by dusky band. Females may be like males but usually have interradial pigment reduced or absent.

In breeding males first ray of pectoral fin bordered along both edges by melanophores, and occasionally few scattered melanophores on first interradial membrane. Rays 2 through about 5 more weakly bordered, primarily along basal portions. Dark spot developed at apex of fin, formed by pigment concentrated primarily in membrane between primary branches of second (first branched) ray (Fig. 4G). In females apical spot may be absent or present but very weak (visible only with magnification).