

- **LATERAL LINE SCALE COUNT:** This represents the number of pored scales in the lateral line or number of scales in the position which would normally be occupied by such scales. In some sciaenid fishes, in which the lateral line scales are greatly enlarged, or are obscured by overlapping smaller scales, the number of 'transverse' (i.e. oblique) rows along the side of the fish just above the lateral line is used, sometimes compared with number of scales with lateral line pores. The count is taken from the scale in contact with the shoulder girdle, to the structural caudal base (as determined without dissection by moving the caudal fin from side to side); the scales wholly on the caudal fin base are not included, even when they are well developed and pored.
- In the Cichlidae, where the lateral line is in two parts, this count is generally now made to the end of the upper lateral line, then by sliding downward and forward (without counting), to the scale in front of the lower line, and continuing the count along the lower lateral line; this may give two extra scales over the count used by some earlier workers.
- **SCALES ABOVE LATERAL LINE:** Unless otherwise stated, these are counted from the origin of the dorsal fin (first dorsal if two), including the small scales, and counting downward and backward to, but not including, the lateral line scale.
- **SCALES BELOW LATERAL LINE:** These are counted similarly to those above but upward and forward from the origin of the anal fin (including the small scales). If, in continuing upward and forward, the series can with equal propriety be regarded as jogging backward or forward, the backward shift is accepted. Scales between pelvic fin and lateral line are used by some authors.
- **SCALES BEFORE DORSAL FIN:** All those which wholly or partly intercept the straight midline from origin of dorsal to occiput (made in fishes in which the transverse occipital line very sharply separates the scaly nape from the scaleless head); 'the number of scales before the dorsal' (commonly fewer than the number of predorsal scales) is made to one side of the midline.
- **CHEEK SCALES:** The number of scales rows crossing an imaginary line from eye to preopercular angle, or at the deepest point of the cheek in some cases.
- **CIRCUMFERENCE SCALE COUNT:** Represents the number of scale rows crossing a line round the body immediately in front of the dorsal fin (particularly valuable in Cyprinidae).
- **CAUDAL PEDUNCLE SCALE COUNT:** The circumference count around the narrowest part of the caudal peduncle (very useful in Mormyridae and Cyprinidae).
- Morphometric measurements: Dividers or dial-reading calipers should be used, also a steel rule, the measuring boards commonly used in fishery investigations are generally not adaptable enough for systematic work.
- It is better to use bony rather than flesh measurements where possible (e.g. from the bony rather than from the fleshy edge of the orbit), as museum keys have generally been prepared on preserved specimens in which there is less soft padding for flesh than in fresh fish.
- **TOTAL LENGTH AND FORK LENGTH:** These are not commonly used in systematic work.
- **STANDARD LENGTH:** In systematic work this is typically taken as the distance from the anterior part of the snout or upper lip (whichever extends farthest forward) to the caudal base (junction of hypural bone and caudal fin rays) in a straight line (not over body curve). Notice that the 'fishery' standard length is measured to the end of the fish with the jaw closed –hence often begins at the tip of the lower jaw.

