ECHIURA CHARACTER TABLE

DEFINITIONS

- 1. <u>Anal vesicles</u>: Pair of thin-walled hind gut sacs connected to the posterior digestive tract, may be simple or branched. Often have ciliated cups or funnels.
- 2. <u>Setae:</u> Hooked or bristle-like structures present in the ventral body wall or encircling the anus.
- 3. Longitudinal muscle bands: Thickening of longitudinal muscles into externally visible (although sometimes faint) bands.
- 4. <u>Nephridia</u>: Saclike organs in anterior portion of trunk used as gonoducts in excretion; look for number and form of associated structures (Nephrostomal lips, nephridiopore, metanephridia)

Species	Setae (#/ attachment)	Visible Longitudinal Muscle Bands (present/absent number)	Nephridia (number, form)	Anal Vesicles (form)	Comments
Urechis caupo	2 near mouth plus more arranged in ring encircling the anus	Absent	2-3; coiled nephrostomal lips	Simple	Bays/shallow, muddy habitats
Nellobia eusoma	None	Absent	1 nephridium present; single conspicuous nephridiopore on left side	dendritic	
Arhynchite californicus	2, paired below mouth	Absent	2 or more, nephrostome within stalked funnel with frilled rim	Up to half the body length, ciliated cups present	Usually >100m depth
Listriolobus pelodes	2, paired below mouth	8 (faint)	4; coiled nephrostomal lips	With small scattered ciliary funnels, capable of great extension	Occasionally see a pale, papillated form
Listrolobus hexamyotus	2, paired below mouth	6 (pronounced)	2, elongate, uncoiled	Simple, thin walled	>400m, often damaged
Prometor pocula	2, paired below mouth (3 rd may be present on right side of body)	Absent	2, oval sacs; may contain ova or dwarf males	Papillated but not dendritic	Not on SCAMIT list but may be present on outer shelf/upper slope (>180m) boring into siltstone

** Although the proboscis is often listed as a distinctive character, it is usually lost or damaged during sample handling and may not be relied upon when making identifications **

NOTES ABOUT DISSECTION:

- 1. Find the ventral nerve chord, you will cut starting at posterior (wider end) on dorsal side (opposite of nerve chord). This way, you avoid cutting into any of the characters you will need to identify the animal
- 2. To cut, use iris scissors and grasp the skin, then make the first incision into the body wall, from there cut anteriorly and pull up slightly on the lower scissor blade to minimize damage to internal structures
- 3. Cut from anus to mouth; gently removing the fecal pellet-filled intestine (use a pipet to carefully flush with fresh ethanol) without tearing the anal sacs or nephridia. It may be necessary to move the specimen into clean ethanol periodically
- 4. Go slowly and be patient