LOBSTERS

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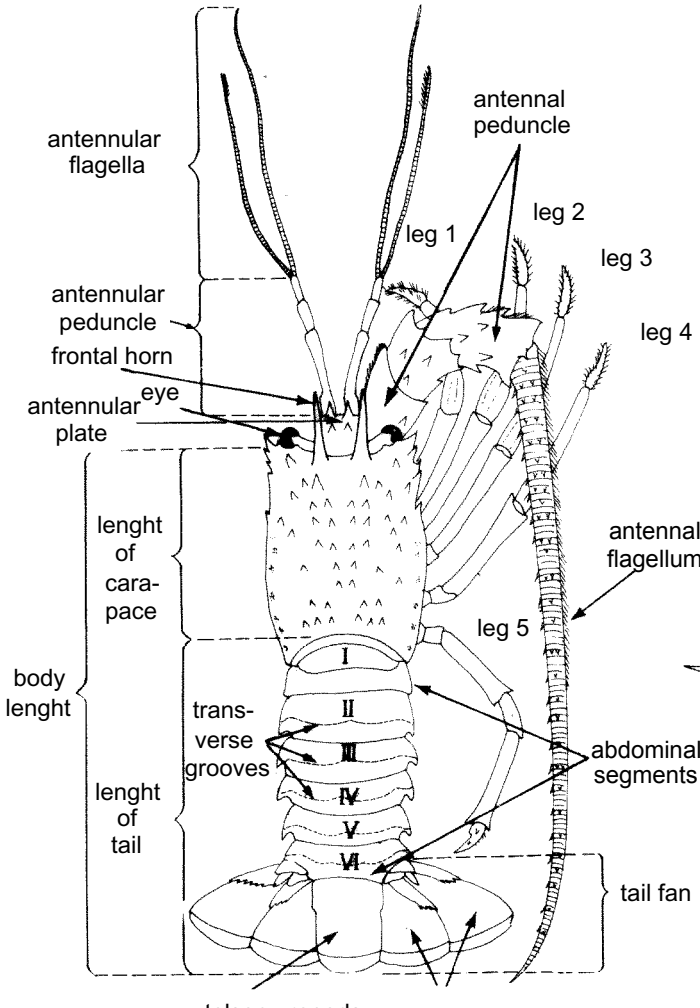
LOBSTERS

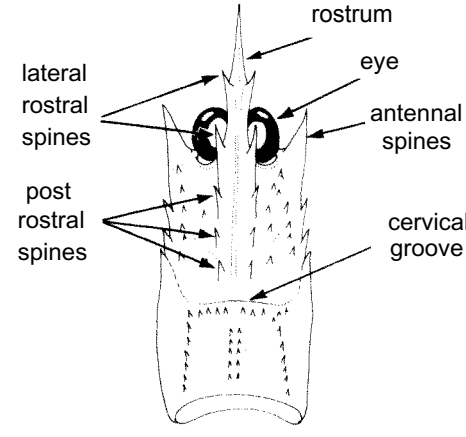
FAO Sheets

Fishing Area 51

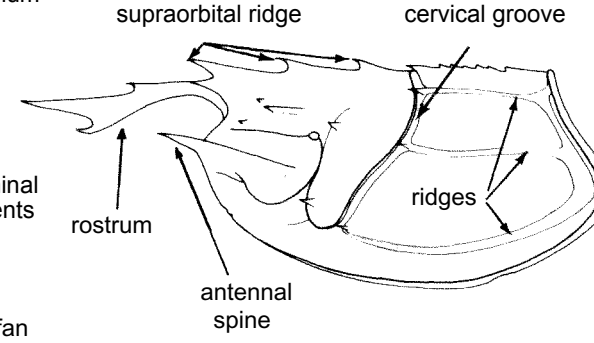
TECHNICAL TERMS AND PRINCIPAL MEASUREMENTS USED



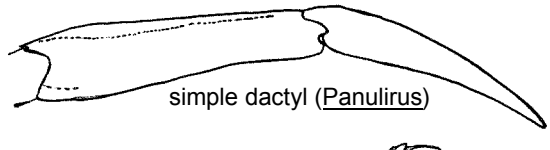
general shape (dorsal view) of a spiny lobster (Panulirus sp.) (no rostrum, no pincers)



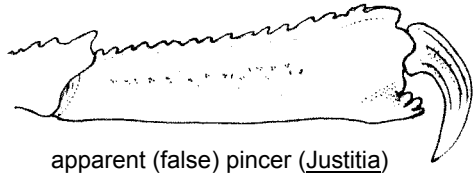
carapace (dorsal view) of a lobsterette (Metariephrops sp.)



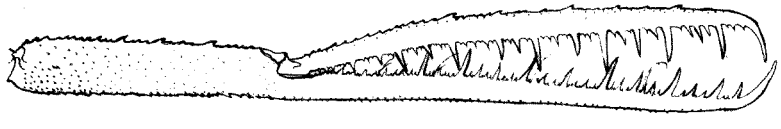
carapace (lateral view) of a lobsterette (Metanephrops sp.)



simple dactyl (Panulirus)

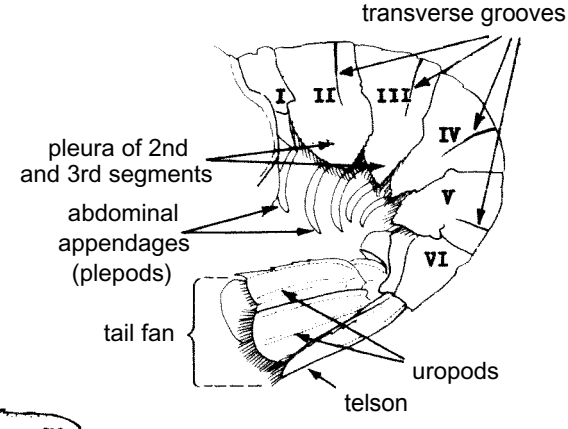


apparent (false) pincer (Justitia)



true pincer (Acanthacaris)

Types of terminal segments of legs in first pair



tail (abdomen) in lateral view segments numbered **I** to **VI**

GENERAL REMARKS

The lobsters include a variety of crustaceans ranging in size (measured from the tip of the rostrum to the end of the tail, thus excluding any of the appendages) from a few to more than 60 cm. They are more or less elongate animals with cylindrical or flattened bodies and a prominent tail or abdomen consisting of 6 movable segments and a terminal fan. The tail is usually about as long as the rigid and often spiny or tuberculate head or carapace. The eyes are stalked and usually movable in the sockets of the carapace, but reduced or unpigmented in some families (e.g., the deep-sea Polychelidae). The most conspicuous of the appendages of the anterior part of the body, situated before and below the carapace, are a pair of usually small, slender antennules, a pair of more robust antennae (long, simple, and cylindrical in most families, scale-like in the slipper-lobsters or Scyllaridae) and 5 pairs of legs (pereiopods, thoracic. legs or walking legs). The first pair of legs is enlarged in certain families (Nephropidae, Polychelidae), in others it differs hardly at all from the following legs (Palinuridae, Scyllaridae). The legs may all end in a simple curved dactyl (e.g., in Palinuridae and Scyllaridae) or some of them may terminate in true pincers or chelae (i.e., the first three pairs in Nephropidae, 4 or 5 pairs in Polychelidae, and the last pair in females of Palinuridae and Scyllaridae). The abdominal appendages are short and biramous, leaf-like supple abdominal legs or pleopods.

In the Western Indian Ocean, the lobsters are represented by 5 families and about 47 species, of which only relatively few can be considered of interest to fisheries at the present time. Most spiny and slipper lobsters (Palinuridae and Scyllaridae, respectively), as well as the Synaxidae usually occur in fairly shallow waters, often on a rocky bottom or a bottom with coarse sediment. Most Nephropidae, a few Palinuridae and Scyllaridae, as well as the Polychelidae are found in deeper water on a muddy bottom.

Shallow-water species like those of the genus Panulirus and several of the family Scyllaridae are actively fished because of their large size and high market value; but most of the lobster fisheries in the Western Indian Ocean are only of moderate importance, the total annual catches from the area averaging about 2 000 tons between 1978 and 1981. Exploratory fishing indicates that some of the deeper-water species may eventually prove to be of commercial interest.

Most of the lobsters are caught with lobster pots, some are taken in fishing nets, and many are speared during night fishing in quite shallow water, or taken by skin divers in slightly deeper waters. A few species are being exported canned or frozen, but most are consumed locally.

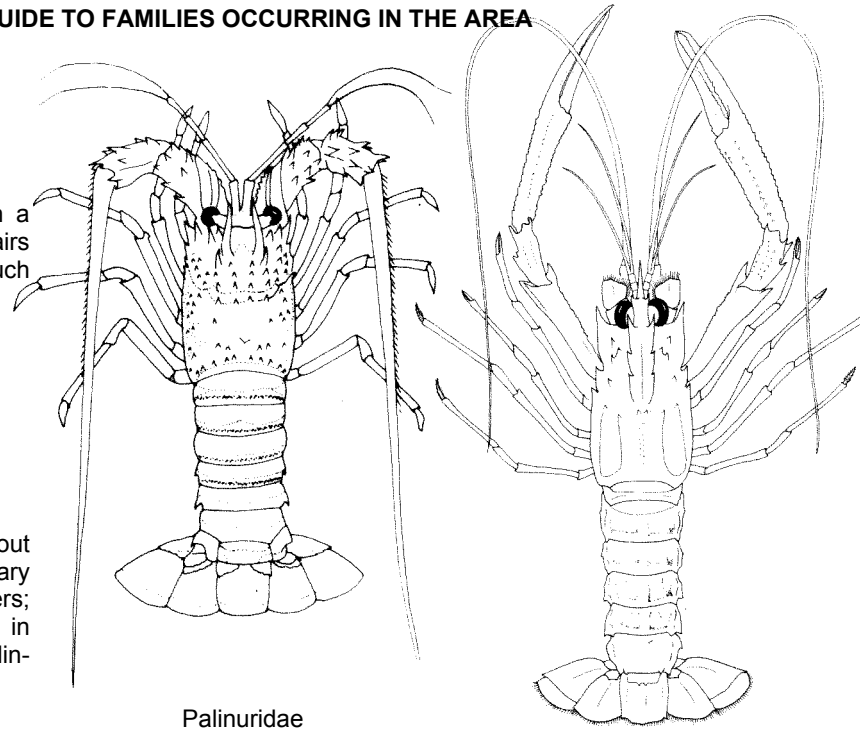
GUIDE TO FAMILIES OCCURRING IN THE AREA

NEPH NEPHROPIDAE: True lobsters and lobsterettes

Body tubular; carapace with a well developed rostrum; first 3 pairs of legs with pincers, first pair much larger than others; antennae cylindrical, longer than body.

PALIN PALINURIDAE: Spiny lobsters

Body tubular; carapace without a rostrum or with a very rudimentary one. Legs without true pincers; first pair not enlarged (except in Justitia). Antennae enlarged, cylindrical, longer than body.

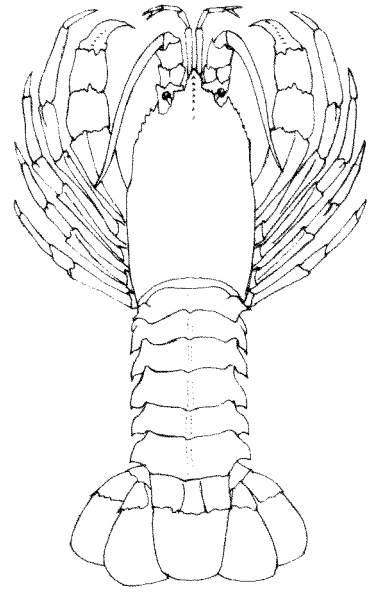


Palinuridae

Nephropidae

SYNAX SYNAXIDAE: Furry lobsters

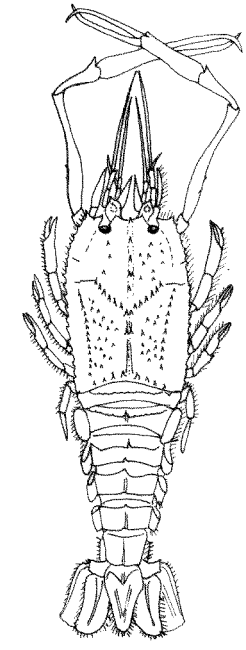
Body tubular, hairy, without enlarged spines; carapace with a small rostrum; legs without pincers, first pair much larger than others; antennae cylindrical, shorter than body. A single species in the area, Palinurellus wieneckii (bright orange).



Synaxidae

POLYCHELIDAE

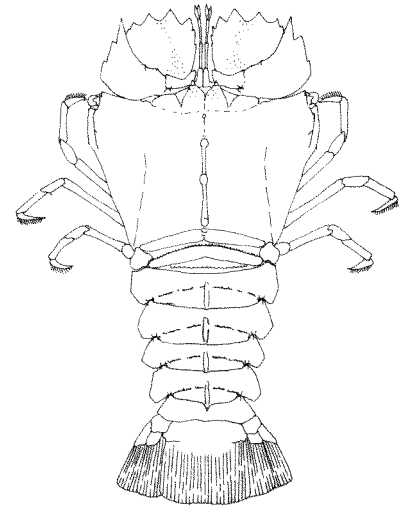
Eyes small and lacking pigment; soft-bodied deep-sea lobsters; carapace without a rostrum, or rostrum rudimentary; telson of tail-fan pointed; first 4 or all legs with pincers, first pair enlarged; antennae cylindrical, shorter than body. No species of interest to fisheries in Fishing Area 51.



Polychelidae

SCYLL SCYLLARIDAE: Slipper lobsters

Body strongly flattened dorsoventrally; carapace without a rostrum; legs without pincers, none of them enlarged; antennae scale-like.



Scyllaridae

LIST OF SPECIES OCCURRING IN THE AREA

Code numbers are given for those species for which Identification Sheets are included

NEPHROPIDAE

Acanthacaris tenuimana Bate, 1888	NEPH Acant 2
Metanephrops andamanicus (Wood-Mason, 1892)	NEPH Metan 2
Nephropsis ensirostris Alcock, 1901 Nephropsis malhaensis Borradaile, 1910 Nephropsis stewarti Wood-Mason, 1873 Nephropsis suhmi Bate, 1888	NEPH Nephps 3
Thymopides grobovi (Burukovsky & Averin, 1976)	

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PALINURIDAE

Jasus paulensis (Heller, 1862)	PALIN Jas 1
Justitia japonica (Kubo, 1955)	
Justitia longimanus mauritiania (Miers, 1882)	PALIN Just 1
Linuparus somniosus Berry & George, 1972	PALIN Lin 1
Palinurus delagoae Barnard, 1926	PALIN Palin 4
Palinustus mossambicus Barnard, 1926	
Palinustus unicornutus Berry, 1979	
Panulirus homarus homarus (Linnaeus, 1758)	PALIN Panul 6
Panulirus homarus megasculptus (Pesta, 1915)	
Panulirus homarus rubellus Berry, 1974	
Panulirus longipes longices (A. Milne Edwards, 1868)	PALIN Panul 7
Panulirus ornatus (Fabricius, 1798)	PALIN Panul 8
Panulirus penicillatus (Olivier, 1791)	PALIN Panul 9
Panulirus polyphagus (Herbst, 1793)	PALIN Panul 10
Panulirus versicolor (Latreille, 1804)	PALIN Panul 11
Projasus parkeri (Stebbing, 1902)	
Puerulus angulatus (Bate, 1888)	
Puerulus carinatus Borradaile, 1910	
Puerulus sewelli Ramadan, 1938	PALIN Puer 1

SYNAXIDAE

Palinurellus wieneckii (De Man, 1881)	SYNAX Pali 2

SCYLLARIDAE

Arctides regalis Holthuis, 1963	
Ibacus novemdentatus Gibbes, 1850	SCYLL Ib 1
Parribacus antarcticus (Lund, 1793)	SCYLL Par 1
Scyllarides elisabethae (Ortmann, 1894)	SCYLL Scyld 5
Scyllarides squammosus (H. Milne Edwards, 1837)	SCYLL Scyld 6
Scyllarides tridacnophaga Holthuis, 1967	
Scyllarus batei Holthuis, 1946	SCYLL Scylr 2
Scyllarus cultrifer meridionalis Holthuis, 1960	
Scyllarus gibberosus (De Man, 1905)	
Scyllarus lewinsohni Holthuis, 1967	
Scyllarus martensii Pfeffer, 1881	
Scyllarus ornatus Holthuis, 1960	
Scyllarus pumilus Nobili, 1905	
Scyllarus rubens Alcock & Anderson, 1894	
Scyllarus rugosus H. Milne Edwards, 1837	
Scyllarus sordidus (Stimpson, 1860)	
Thenus orientalis (Lund, 1793)	SCYLL Then 1

POLYCHELIDAE

Stereomastis andamanensis (Alcock, 1894)	
Stereomastis phosphorus (Alcock, 1894)	
Stereomastis sculpta (S.I. Smith, 1880)	
Polycheles beaumontii (Alcock, 1894)	
Polycheles gibbus Alcock, 1894)	
Polycheles hextii (Alcock, 1894)	

Prepared by L.B. Holthuis, Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands. Partly based on Species Identification Sheets for the West Central Atlantic (Fishing Area 31) prepared by R.B. Manning, Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C., USA

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