TECHNICAL TERMS AND PRINCIPAL MEASUREMENTS USED

Types of terminal segments of legs in first pair

Fishing Area 51
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.
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).

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.

SCYLL
SCYLLARIDAE: Slipper lobsters

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

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
Metanephrops andamanicus (Wood-Mason, 1892)
Nephrops ensirostris Alcock, 1901
Nephrops malhaensis Borradaile, 1910
Nephrops stewarti Wood-Mason, 1873
Nephrops suhmi Bate, 1888
Thymopides grobovi (Burukovsky & Averin, 1976)
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PALINURIDAE

- *Jasus paulensis* (Heller, 1862)  
  PALIN Jas 1
- *Justitia japonica* (Kubo, 1955)  
  PALIN Just 1
- *Justitia longimanus mauritiana* (Miers, 1882)  
  PALIN Just 1
- *Linuparus somniosus* Berry & George, 1972  
  PALIN Lin 1
- *Palinurus delagoae* Barnard, 1926  
  PALIN Palin 4
- *Palinustus mossambicus* Barnard, 1926  
  PALIN Palin 4
- *Panulirus homarus homarus* (Linnaeus, 1758)  
  PALIN Panul 6
- *Panulirus homarus megasculptus* (Pesta, 1915)  
  PALIN Panul 6
- *Panulirus longipes longipes* (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)  
  PALIN Puer 1
- *Puerulus angulatus* (Bate, 1888)  
  PALIN Puer 1
- *Puerulus carinatus* Borradaile, 1910  
  PALIN Puer 1
- *Puerulus sewelli* Ramadan, 1938  
  PALIN Puer 1

SYNAXIDAE

- *Palinurellus wieneckii* (De Man, 1881)  
  SYNAX Pali 2

SCYLLARIDAE

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

POLYCHELIDAE

- *Stereomastis andamanensis* (Alcock, 1894)  
  SCYLL Then 1
- *Stereomastis phosphorus* (Alcock, 1894)  
  SCYLL Then 1
- *Stereomastis sculpta* (S.I. Smith, 1880)  
  SCYLL Then 1
- *Polycheles beaumontii* (Alcock, 1894)  
  SCYLL Then 1
- *Polycheles gibbus* Alcock, 1894  
  SCYLL Then 1
- *Polycheles hexti* (Alcock, 1894)  
  SCYLL Then 1

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