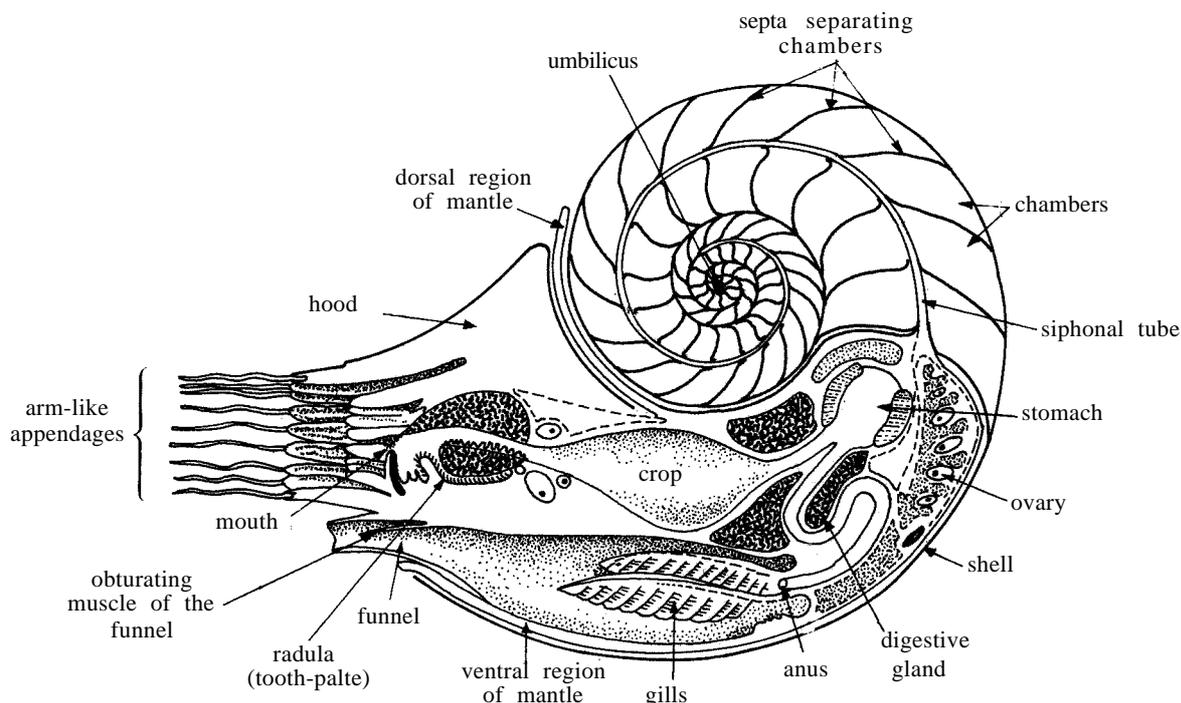


2. CHAMBERED NAUTILUSES (Order Nautiloidea)



schematic cross section of a Nautilus

The living chambered nautiluses are limited to four extant species in the genus Nautilus, the sole survivors of a once extremely speciose subclass. They possess a coiled, pearly, external shell punctuated with chambers; the animal lives in the outermost chamber with its body attached to the septum (posterior wall of the chamber). A siphonal tube penetrates each septum and serves as a wick to remove fluid from the former living chambers, thus enabling the animal to regulate its buoyancy through control of fluid and gas in the outermost chambers. Nautilus has 2 pairs of gills, unique in living cephalopods, and up to 47 pairs of circumoral arm-like appendages—more in females (up to 94) than in males (up to 63); suckers are lacking; the eyes are simple, without lenses; the funnel or infundibulum, consists of 2 lobes that fold together to form a tube-like structure that serves for locomotion. Chromatophores and ink sac are lacking. Geographically limited to the tropical Indo-West Pacific, nautiluses live in association with the bottom, primarily reefs, from near the surface to about 500 m depth.

2.1 FAMILY NAUTILIDAE Blainville, 1825

NAUT

Nautilidae Blainville, 1825, Man.Malacol.Conchyl., 1825:386.

FAO Names : En - Chambered nautiluses
Fr - Nautilus
Sp - Nautilus

General Remarks on the Family : The recent nautiloids are represented by only four living species of Nautilus (Saunders, 1981). All of these are found in the Indo-West Pacific region and several of these species are of commercial value as food, largely at the artisanal and subsistence levels, and in the shell curio trade, e.g., in India, Indonesia and the Philippines.

Species Currently Recognized : Code numbers are given for those species for which further information is given in this catalogue.

Nautilus belauensis Sanders, 1981; distribution Palau, western Caroline Islands
Nautilus macromphalus Sowerby, 1849
Nautilus pompilius Linnaeus, 1758
Nautilus scrobiculatus (Lightfoot, 1786); distribution Solomon Islands and New Guinea

NAUT Naut 1
NAUT Naut 2

Nautilus macromphalus Sowerby, 1849

NAUT Naut 1

Nautilus macromphalus Sowerby, 1849, *Thes.Conchyl.*, 2:464.

Synonymy : None

FAO Names : En - Bellybutton nautilus
Fr - Nautilé bouton
SP - Nautilo ombligo

Diagnostic Features : Umbilicus a deep concavity not filled with a concretion; colour markings on shell reduced.

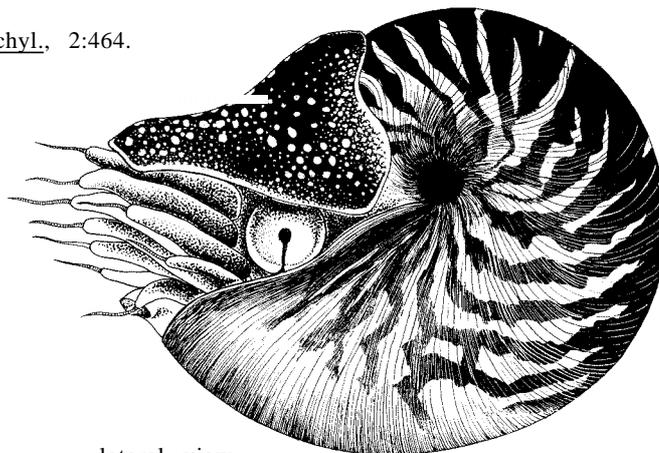
Geographical Distribution : Western Pacific; New Caledonia and Loyalty Islands.

Habitat and Biology : Continental shelf and slope, from the surface to about 500 m (?) depth, associated with hard bottoms.

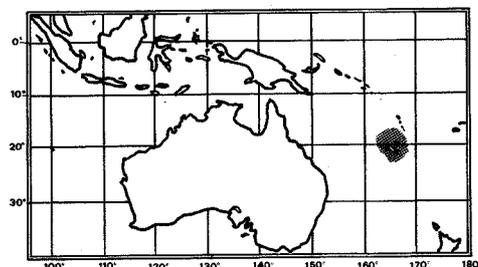
Size : Maximum shell diameter about 20 cm.

Interest to Fisheries : Consumed locally; also supports a small fishery for public aquarium and research trade. Collected alive at about 65 m depth on the outer slope of the Barrier Reef in New Caledonia; in the Coral Sea, trapped at 300 to 400 m.

Local Names : NEW CALEDONIA : Chambered nautilus.



lateral view



Nautilus pompilius Linnaeus, 1758

NAUT Naut 2

Nautilus pompilius Linnaeus, 1758, *Syst. Nat.*, ed.10:709.

Synonymy : *Nautilus ambiguus* Sowerby, 1849; ? *Nautilus stenomphalus* Sowerby, 1849; *Nautilus alumnus* Iredale, 1944; ? *Nautilus repertus* Iredale, 1944; varieties: *N. p. perforatus*, Willey 1896; *N. p. marginalis*, Willey, 1896; *N. p. moretoni*, Willey 1896

FAO Names : En - Emperor nautilus
Fr - Nautilé flammé
Sp - Nautilo común

Diagnostic Features : Umbilicus filled in with a concretion; flame-striped colour pattern, extending across nearly entire shell.

Geographical Distribution : Indo-West Pacific; Andaman Islands, Amboina, the Philippines, New Guinea to Fiji; Australia.

Habitat and Biology : Continental shelf and slope from near the surface to about 750 m depth, associated with hard bottoms, particularly coral reefs. Undergoes diel vertical migrations.

Size : Maximum shell diameter about 20 cm.

Interest to Fisheries : Supports shell trade, mostly from beach-drift specimens, and subsistence and artisanal fisheries in Negros (the Philippines). Captured in bamboo fish traps at 60 to 240 m depth. The meat is sold in local markets and the shells sent to Cebu City for the shell trade.

Local Names : NEW CALEDONIA, PHILIPPINES: Chambered nautilus.



lateral view

